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**Catalogue of the Coleoptera common to North America,  
Northern Asia and Europe, with the dis-  
tribution and bibliography.**

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The primary object in composing this catalogue was to facilitate the exchange of Coleoptera between the collectors of both continents who desired to obtain as many as possible of the species common to both. It was then seen that the addition of the distribution of these species in this country so far as known, and also a general view of the European and Asiatic distribution, would be of great use, and valuable in other directions. Catalogues with the general distribution of the species in Europe and Asia are available by the American student or collector, but no work of this kind has been attempted in America, and the distribution with us of the species common to both countries is mostly unknown in Europe, and known even here to comparatively few.

The information relating to the American distribution has been gleaned from the works of our systematic authors, and the various catalogues of collectors as will be seen by the bibliographical references; while my own collection, and specimens obtained from many places, have enabled me to give much local distribution not heretofore on record. The cabinets of many collectors would, no doubt, add much knowledge in this direction were their contents known. The want of local catalogues at several points was greatly felt in prosecuting this work, notably Nova Scotia, Massachusetts, District of Columbia, Louisiana, Manitoba, British Columbia. The Kansas catalogue is too disjointed to be easily consulted.

Where Alaska, Sitkha, Kenai, Unalashka, Kadjak are mentioned without reference, in nearly every instance Mannerheim's contributions to a knowledge of the Coleoptera of the Pacific coast are the authority. The first of these was published in the Bulletin of the Imperial Society of Naturalists of Moscow in 1843, and supplements in 1846, 1852 and 1853 respectively, the whole constituting a catalogue in which all the species taken in Alaska till the date

last mentioned are enumerated and described, with bibliography and localities; the description of the brachelytra and some other minute things having been furnished by Maeklin. This includes all the Alaskan species made known in 1829 by Eschscholtz in his Zoological Atlas, and by Menetries, Motschulsky and others in various publications till 1853, since which time comparatively little has been added from any and all sources to our knowledge of the Coleoptera of that region. After excluding all species described from the Pacific coast not found in Alaska, there remained 540 species belonging to that fauna, the greater number of which occurred in Sitkha and the peninsula of Kenai. As the species from Alaska, Siberia and Arctic Europe mentioned in the following work, nearly all passed through the same hands their identity is reasonably certain.

The European distribution is indicated only in general. The Asiatic is derived from various sources, and whoever desires to pursue that distribution further will find the complete bibliography in the Catalogue of the Coleoptera of Siberia and the Russ-Asiatic provinces by Lucas von Heyden, Berlin, 1880-81, and 1885-87.

A number of the species have undoubtedly been introduced from Europe into this country in articles of commerce, or by some accident, and have become naturalized; others again are just as certainly indigenous in both hemispheres, while a certain number are of doubtful origin, about which it has been thought best to express no opinion, leaving this to individual speculation.

At some remote period in the past America and Asia were certainly connected on the North by land, and had then a much milder climate than now exists, and, without doubt, when scientific enthusiasm shall have overcome the formidable obstacles that have hitherto prevented all but the most superficial collecting in these inhospitable regions of both continents, many species will be found to inhabit them in common. The species that are known to be indigenous to both appear to have practically undergone no variation, though no small division of time must have intervened since the separation of their ancestors. *Loricera cærulescens*, from Lake Superior and from Scotland, do not seem to vary to the extent of a hair on the antennæ. *Eretes sticticus*, from Asia Minor and from Texas, appear absolutely identical in every point. *Corymbites tessellatus*, from Canada and from the Italian Alps, can only be separated by the labels, and I might enumerate many other species that I have seen and compared. Several European species, not included in this cata-

logue, have been mentioned in parts of our literature as occurring in America, but the determinations have been erroneous, or the species when introduced have failed in self propagation.

The great number of species common to Siberia, the Lake Superior region and the Rocky Mountains of southern Colorado, around Veta Pass is noticeable, the interpretation of which is that the Coleoptera of these regions have been more extensively collected and identified than elsewhere. When other elevated or northern parts of the continent having a similar temperature and corresponding conditions shall have been as carefully gone over the same results may be confidently predicted.

### Bibliographical Abbreviations.

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**An. Lyc.**—Annals of the Lyceum of Natural History of New York.

**Austin**—Catalogue of the Coleoptera of Mt. Washington, N. H., Proc. Bost. Nat. Hist. Soc. vol. xvi.

**Blanchard**—Mr. F. Blanchard by letter or specimens.

**B. J.**—Boston Journal of Natural History.

**Bowditch**—LeConte's List of Coleoptera collected by Mr. F. C. Bowditch in the Rocky Mountains, Bull. U. S. Geol. and Geog. Surv. Terr., vol iv. No. 2, 464.

**Bull. B.**—Bulletin of the Brooklyn Entomological Society.

**Can. Ent.**—Canadian Entomologist.

**Casey**—Revision of the Stenini of America North of Mexico.

**C.**—Classification of Col. of N. A. LeConte and Horn, 1883.

**Crotch**—Revision of the Coccinellidæ by G. R. Crotch, A. M., London, 1874.

**Dury**—List of Coleoptera around Cincinnati, Ohio, 1879, 1882, 1884.

**Col. Am.**—Coleoptera of Eastern Siberia, and especially of the river Amour, by Motschulsky, St. Petersburg, 1860 [Tr.]

**Ent. Am.**—Entomologica Americana.

**Fauv.**—The Staphylinidæ of North America, by M. A. Fauvel. Part 7 [Tr.]

**Harrington**—List of the Coleoptera around Ottawa, Canada, 1884.

“ in lit.—Manuscript List. Supplemental.

**Heyden**—Catalogue of the Coleoptera of Siberia, Turanian Provinces, Turk-  
estan and the Chinese frontier, by L. V. Heyden. Berlin, 1880-81 [Tr.]

**Heyden**—1885-87. Contributions to a knowledge of the Coleoptera of  
Amurland, by Dr. V. Heyden, Deutsche Ent. Zeitschrift. xxix, xxx, xxxi, heft ii.

**J.**—Journal of the Academy of Nat. Sciences, Philadelphia, second series.

**Kirby**—Vol. iv. Richardson's Fauna Boreali-Americana.

**L. S.**—Lake Superior. Agassiz, Boston, 1850.

**LeConte Cat.**—Lists of Coleoptera by Dr. R. Bell on the Nelson and Church-  
hill Rivers, Hudson Bay Territory, between Lake Winnipeg and Hudson Bay,  
and in Manitoba (Canadian Gov. Reports). Montreal, 1880-81.

**Mann.**—Beitrag Zur Kaefer Fauna der Aleutischen Inseln, der Insel Sitka,  
und neu-Californiens. With three supplements: 1845, 1846-52 and 1853, by  
Graf. C. G. Mannerheim (Bulletin Imp. Soc. Naturalists, Moscow).

- Mon.**—Trichopterygia Illust. et Desc., by Rev. A. Matthews, M. A. London.
- Mon.**—The Rhynchophora of America North of Mexico, LeConte & Horn, 1876.
- Mots.**—Insects of Siberia taken in the tour of 1830 and 1840. Carabidæ, Motschulsky.
- Murr.**—Monograph of the Nitidulariæ, by Andrew Murray. Part 1. London, 1864.
- Nord.**—The Coleoptera of Prof. Nordenskiöld's Expedition to Nova Zembla and the Jenisei, by Fr. W. Maeklin. Stockholm, 1881.
- N. S.**—LeConte, New Species of American Coleoptera, No. 167, Smith. Miscel. Collect.
- Packard**—List of the Coleoptera collected in Labrador, by A. S. Packard, Jr. (Ann. Rep. Peabody Acad. Sci. 1871.)
- P.**—Proceedings of the Academy of Natural Sciences, Philadelphia, 2d series.
- Pr.**—Proceedings of the Academy of Natural Sciences, Phila., other series.
- P. Am. P.**—Proceedings of the American Philosophical Society, Philadelphia.
- P. W.**—Proceedings of the Academy of Sciences, Washington, D. C.
- P. R. R.**—U. S. Pacific Railroad Expedition and Surveys, 47th parallel, vol. ii. Zoology. Report of the Insects collected, by John L. LeConte, M. D.
- Reinecke**—List of the Coleoptera of Buffalo, N. Y., by Messrs. F. Zesch and O. Reinecke, 1880.
- Schwarz**—The Coleoptera of Florida. List of species, by E. A. Schwarz, 1878.
- “ The Coleoptera of Michigan. List of species of the Lake Superior region.
- Schwarz**—List of the Coleoptera of the Lower Peninsula, by H. G. Hubbard and E. A. Schwarz, 1878.
- Schwarz**—LeConte's List of the Coleoptera collected by E. A. Schwarz in the Rocky Mountains (Bull. U. S. Geol. and Geog. Surv. Terr. vol. v. No. 3, 500).
- Sh.**—The Dytiscidæ, by David Sharp, M. B. [From the Scientific Trans. of the Royal Dublin Society, vol. ii. second series, 1880–82.]
- Snow**—Various lists of Coleoptera of parts of Kansas and New Mexico, in Trans. Kans. Acad. Sci. vols. vi. vii. and viii.
- Sprague**—Catalogue of the Coleoptera of the Green Mountains, Vermont, by R. Hayward and H. Savage, 1883 (Quart. Jour. Bost. Zool. Soc.).
- T.**—Transactions of the American Entomological Society, Philadelphia.
- T. Am. P.**—Transactions of the American Philosophical Society, Philadelphia.

## CARABIDÆ.

1. *Cychnus angusticollis* Fisch., *velutinus* Menet.

This species occurs from Unalashka and Sitka, whence I have specimens, to northern California. It also inhabits Kamtschatka, Heyden, 5.

2. *Carabus Vietinghovi*, Adams., var. *fulgidus* Fisch., var. *Schaumi* Mor.

This beautiful species inhabits Alaska, extending east towards Hudson Bay, and south towards British Columbia (Horn). Can. Ent. viii. 127; Pr. 1873, 322, Asia (Turkestan, the Amur country and on the Lena), Heyden, 6; Mots., 102; Heyden, 1886.

3. *C. Mæander* Fisch., *Lapilayi* Lap. *Tatumi* Motsch. *palustris* Fisch.

This species occurs in Michigan, the Lake Superior region, Canada, the Hudson Bay region, Manitoba. "Extends from North America through Kamtschatka to Siberia (Horn)." Pr. 1873, 322; LeConte Cat.; Heyden, 8; Motsch., 95; Col. Am., 99.

4. *C. truncaticollis* Esch.

Occurs in Alaska, and has been taken in the higher parts of the Sierra Nevada, California. In Asia it occurs in Kamtschatka. T. ix. 31; Heyden, 6.

5. *Elaphrus riparius* Lin., *sinuatus. similis* Lec., *intermedius* Kirb., *californicus* Mann.

A species somewhat variable and widely distributed, extending from New Mexico through the Rocky Mountains to California and Alaska, and eastward to Michigan and Canada. It is general in Europe, and in Asia from the Crimea, Turkestan, Dauria and Amur country northward through Siberia. Mots., 72; Col. Am., 88; Solsky, 233; Heyden, 4; Chaud., 217.

6. *Diachila arctica* Gyll.

"Common to both Europe and America." Cl., 11, Europe (Lapland), Asia (Arctic Siberia); Heyden, 5.

7. *Blethsia multipunctata* Lin.

I have specimens from northern Wisconsin. Schwarz and Hubbard took it at Escanaba, Mich. "Northern United States," Bull. B. i, 29. Central and northern Europe. Arctic and western Siberia, Mots., 93; Heyden, 5.

8. *Loricera cærulescens* Lin., *semipunctata* Mann., *neoscotica* Lec., *pilicornis* Fab.

This species occurs in northern Michigan, the Lake Superior region, Nova Scotia, "north of Europe and of the United States." Bull. B. i, 29; L. S., 208; An. Lyc., iv, 162; central and northern Europe; W. and E. Siberia, var. *rufilabris* Mots.; Kamtschatka, the Amur. Mots., 141; Col. Am., 96; Heyden, 21.

9. *Notiophilus sibiricus* Mots., *confusus, punctatus* Lec.

This beetle is distributed from Tennessee northward to Hudson Bay, and from New Mexico through the Rocky Mountains to the Pacific. It is found in Arctic Siberia, the Transbaical and Mongolia, but does not reach Europe. Mots., 85; Heyden, 4.

10. *N. aquaticus* Linn.

No record of this species occurring in our fauna has been observed,

except in error, and Dr. Horn does not know of its identification. western and the southeast parts of eastern Siberia. Mots., 85; Heyden, 4.

11. *Leistus piceus* Froh.

"A specimen of this common European insect was found at Fitchburgh, Mass." T. v, 169. No other record of its occurrence has been observed.

12. *Nebria carbonaria* Esch., var. *lyrodera* Mots.

Sitka. St. Paul's Island. Kamtschatka. T. iii, 104; Heyden, 13; Col. Am., 98.

13. *N. bifaria* Mann., *carbonaria* ‡ Mann.

St. Michaels. Alaska. St. Paul's Island. Kamtschatka. T. iii, 103; Heyden, 13; Mann., 1852 and 1853.

14. *N. nivalis* Payk.

Said to occur in Greenland, T. iii. 103. Arctic Europe; common in Scotland. Heyden, 14, Bull. U. S. G. Surv. vol. iv, No. 2, p. 479.

15. *Clivina fossor* Lin., *collaris* ‡ Lec., *elongata* || Rand., *Randalli* Lec.

This species occurred on the sea-coast near Boston, Mass., and was probably introduced. Cincinnati, Ohio, Dury. Inhabits Europe, and Siberia to Kamtschatka. Heyden, 15.

16. *Nomius pygmæus* Dej.

"Occurs under stones, etc., in moist places, in various parts of southern Europe, where it seems rare, and in many places in our country from Georgia to California." T. ix, 130; An. Lyc., iv, 208, Ottawa, Canada, Lake Superior, Alabama.

17. *Bembidium paludosum* Panz., *littorale* Oliv., *lacustre* Lec.

Inhabits the Lake Superior region; Ohio, Dury; New York, Reinecke; Oregon, LeConte. Europe. Western Siberia. Mots., 272; Heyden, 52.

18. *B. rupestre* Linn., *femoratum* Gyll., *tetracolum* Say, var. *rupicola* Kirby.

This species is widely distributed, though it occurs mostly in restricted localities. I have it from Canada, Colorado, and take it here. New York, Reinecke; Hudson Bay region, Kirby; Lake Superior region. Europe. Western Siberia. Mot., 244; Heyden, 50.

19. *B. Grapei* Gyll., *nitens* Lec., *picipes* ‡ Mann.

This species extends from New Hampshire to Alaska (New York, Lake Superior, Fort Simpson on the McKenzie River); northern Europe. L. S. 211; An. Lyc. iv, 465; Pr. 1860, 316; Seliwaninskoj, an island in the Jenisei, lat. 65° 55'. Nord. 21; Heyden, 222.

20. *B. undulatum* Sturm., *dentellum* Thunb.

I take this species abundantly in swampy places, where there is grass and rubbish. It also occurs in Alaska, Mann., 1853; Can. Ent. xx, 61. Europe. Western Siberia. Mots., 269; Heyden, 51.

21. *B. assimile* Gyll., *frontale* Lec.

Taken abundantly with the preceding. This species extends from Florida to New Mexico, and northward to Lake Superior. Europe. West Siberia. An. Lyc. 462; Can. Ent. xx, 61; Mots., 263.

22. *B. quadrimaculatum* Lin., *oppositus* Say.

This species occurs abundantly nearly every place in the United States and Canada. Europe. Arctic and all Siberia. Mots., 250.

23. *Tachys nanus* Gyll., *inornatus* Say, *Tachyta picipes* Kirby.

Found abundantly under the bark of dead trees throughout the United States and Canada, likewise in Europe and Siberia. Mots., 238; Col. Am., 91.

24. *Patrobus septentrionis* Dej., *tenuis*, *rufipes* Lec., *hyperboreus* Dej., *longiventris* Mann., ? *fossifrons* Esch., ? *foveicollis* Esch. (Unalaschka), ? *obtusiusculus* Chaud. (Hudson Bay), ? *stygius* Chd. (New Foundland), *lacustris* Mots.

This species inhabits Arctic America and southward to northern Michigan and Mt. Washington, N. H. A certain amount of local variation has caused much synonymy. Arctic and the mountains of central Europe. W. and E. Siberia; *fossifrons* Esch. = *cinctus* Mots., inhabits Kamtschatka and Ochotsk. T. v, 130 and 248; Mots., 130; Col. Am., 91; Heyden, 25.

25. *Trechus rubens* Fab.

Occurs in Nova Scotia and northern Europe T. v, 131. Ottawa, Canada, *Harrington in lit.*

26. *Pterostichus punctatissimus* Rand., *cancellatus* Mots., *Schrenki* Morawitz.

This fine species occurs from Maine to Hudson Bay and westward (Massachusetts, New Hampshire, Lake Superior, Canada, Hudson Bay, LeConte Cat.). Arctic Siberia, the Amur, Dauria. Heyden, 36; Bull. B. v, 39; LeConte Cat.

27. *P. vitreus* Dej., *Maeklini* Lec., *oblongopunctatus* Geb. (nec F.)

Inhabits Alaska and California. Boreal Europe. W. and E. Siberia to Kamtschatka. Mots., 155; Heyden, 35; Bull. B. v, 40.

28. *P. mandibularis* Kirby, *ochoticus* Sahl., *fastidiosus* Mann.

This species is spread from Alaska to Hudson Bay, and southward to Lake Superior, Vermont and Massachusetts. Arctic Siberia



(Ochotsk, the islands at the mouth of the Jenisei and some of its tributaries). Col. Am., 93; Heyden, 35; LeConte Cat. Pr. 1873, 315.

29. *P. empetricola* Dej., var. *frigidus*, Dej.

Sitka. Kenai. Hudson Bay Territory; var. *frigidus* occurs in Kamtschatka and the islands at the mouth of the Jenisei. Pr. 1873, 315; Heyden, 35.

30. *Amara Eschscholtzii* Chaud.

Alaska, Colorado, high peaks of the Rocky Mountains (Ulke), Kamtschatka. Heyden, 40, P. vii, 348.

31. *A. melanogastrica* Dej.

Alaska. Kamtschatka. Heyden, 40; P. vii, 348.

32. *A. hyperborea* Dej., *obtusa* Lec., *Eschscholtzii* Mann., *longicollis* Mots.

Alaska, Rocky Mountains at 14,000 feet (Bowditch). Arctic Siberia. Kamtschatka to eastern Dauria. Col. Am., 95; Heyden, 40; P. vii, 348; T. v, 127.

33. *A. apricaria* Payk.

"Occurs in Canada, *fide* Putz. and may be the same as *Putzeysii* Horn." *Horn in litt.* Europe. Common throughout west Siberia. Arctic and east Siberia. Turkestan. Crimea. Mots., 179; Heyden, 40; Chaud., 221.

34. *A. littoralis* Mann.

Sitka. Kamtschatka. P. vii, 351; Heyden, 37.

35. *A. erratica* Duft., *laevipennis* Kirby, *vulgaris* † Kirby, *inepta*, Lec.

The determination of this species is more or less opinionative in this country and in Europe. I obtained from Europe specimens from three sources all purporting to be authoritatively determined, but evidently belonging to as many distinct species. As named in our literature, it is widely distributed across the northern part of the continent (Hudson Bay to Alaska, and south to Vermont, Lake Superior, and down the Rocky Mountains to New Mexico). P. 351 and 353. Pr. 1873, 324; Saostrovin. Arctic Siberia. Mongolia. Turkestan. Heyden, 38.

36. *A. interstitialis* Dej., *inæqualis* Kirby, *splendida* Hald.

This species is variable in color and elytral sculpture. It is distributed from Pennsylvania to Hudson Bay, to Fort Simpson on the McKenzie River, and southward through the Rocky Mountains to

New Mexico. Arctic Europe. Kamtschatka. Arctic Siberia. Lake Kiski. P. vii, 353; LeConte Cat.; Heyden, 38; *bipartita*, Mots., Irkutsk; *borealis* Mots., Turkestan. Col. Am., 96.

37. *A. brunnea* Gyll., var. *Lapponica* Sahlb., *Sahlbergi* Zett., *amplicollis* Mann.

Alaska. Northern and central Europe. Siberia (Irkutsk, on the Lena), Pupkowskii on the Jenisei, lat. 64° 49'. Mann., 1853; Heyden, 39 and Nord. 21.

38. *Licinus silphoides* Fab.

This European species has been taken alive in Massachusetts, but whether it breeds in this country is uncertain. Pr. 1873, 324; T. viii, p. xix.

39. *Badister bipustulatus* Fab.

Two specimens occurred on Vancouver Island, B. C. As this species reaches high latitudes in Europe and Asia, possibly it may have passed over to Alaska and southward, like many others. T. viii, 165; Mots., 141; Heyden, 24; Chaud., 228.

40. *Pristonychus complanatus* Dej.

This species, native in central Europe, transported by commerce, has occurred on both sides of the continent, but does not appear to be properly naturalized, except in California.

41. *P. terricola* Hbst., *inæqualis* Panz.

This species has likewise been introduced from Europe, but does not seem to spread. I have never seen a native specimen of this nor the preceding. Occurs also in California (cab. Horn).

42. *Platynus bicolor* Dej., *marginellus* Lec., *castaneipennis* Mots., *fallax* Moraw.

Mount Washington, N. H. (*Austin*), Fort Simpson on the McKeuzie (*LeConte*), California. Kamtschatka, the Amur to west Siberia, the Obi. Pr. 1860, 315; Col. Am., 97; Mots., 134; Heyden, 30.

43. *P. (Anchus) pusillus* Lec., *oblongus* Fab.

This species extends across the northern part of the continent (Massachusetts, New York, Canada, Michigan, Illinois, Kansas, Oregon). Central and northern Europe. Spirina in Arctic Siberia, E. and W. Siberia. T. ix, 142; Can. Ent., xx, 61; Mots. 133; Heyden, 28.

44. *P. impressus* Panz., var. *splendidulus* Mots.

The variety occurs at Sitka and Kamtschatka according to Motschulsky, Mot. 138. *P. perforatus* Lec. described from Methy, Hud. Bay Terr., on comparison, may prove to be this species. LeConte (Bull. B. ii, 52), *P. impressus* inhabits Arctic, western and eastern Siberia to Kamtschatka; also Europe. Heyden, 28; Heyden, 1886.

45. *P. Mulleri* Hbst., *parumpunctatus* Fab., *planipennis* Mot.

If the last synonym is correct, as per Munich Cat. 374, this species occurs at Sitka. Siberia (Tobolsk). Arctic and central Europe. This is a fine species. Bull. B. ii, 52; Mot. 137; Heyden, 28.

46. *P. Bogemanni* Gyll., *borealis* Mot., *obsoletus* Say, *placidus* ‡ Lec., *strigicollis* Mann.

Dr. LeConte hesitated to unite *obsoletus* with *Bogemanni*, having only one specimen of the latter for comparison. I have compared six individuals from Sweden with about fifty of *obsoletus* with the result of discovering no permanent character by which they may be separated. *Obsoletus* is distributed generally throughout the United States, Canada and British Columbia to Alaska. Northern Europe. Eastern Siberia. Salair, western Siberia. Bull. B. ii, 52; Heyden, 30.

47. *P. quadripunctatus* Dej., *stigmatosus* Lec., *octocolus* Mann.

This species is abundant in New York, Canada, Michigan, Wisconsin, Lake Superior region, Alaska and the Rocky Mountains to New Mexico. Central and northern Europe. E. and W. Siberia. P. vii, 58; Bull. B. 57; Mots. 140; Heyden, 30; Chaud. 226. *P. octocolus*, according to Heyden, is not a synonym of *4-punctatus*, but is placed in the subgenus *Batenus* Mots. It occurs from Dauria to Kamtschatka. Heyden, 28.

48. *Blechrus nigrinus* Mann., *linearis* Lec.

According to Horn (T. xiii, p. ix) this species is "very probably *B. glabratus* Duft." It occurs in Canada, New York, Michigan, Wisconsin, the Rocky Mountains, California, Vancouver. T. x, 134. *B. glabratus* inhabits central and northern Europe. Not rare in the Kirg. Steppes and in Siberia. Mots. 60; Heyden, 17.

49. *Plochionus pallens* Fab., *valens* Lec., *Bonfilsii* Dej.

This species is not of common occurrence in the interior, but being "diffused by commerce over the entire globe, it is found near all cities of our sea-board visited by foreign vessels." Horn, T. x, 146.

50. *Miscodera arctica* Payk., *erythropus* Mots. (Mots. 76: described and figured) *americana* Mann., *Hardyi* Chaud.

This species occurs in the northern parts of America from Alaska to New Foundland. Northern Michigan, *Schwarz*. Horn writes of the various names (T. ix, 168): "It is all one species varying in size and brilliancy of surface in the different localities." Europe (the mountains of Britain, the Alps, Boreal Europe). Eastern Siberia, the Amur. Heyden, 24; Col. Am. 91.

51. *Stenolophus ochropezus* Say, *limbatus* Mann., *convexicollis* Lec., *gracilis* Casey.

This species extends from Arizona to the Atlantic, and north to Canada. I have specimens from New Mexico and Colorado. In many places it is abundant. *Limbatus* occurs in Kamtschatka. Bull. B. vi, 15; Heyden, 47.

52. *Bradycellus cognatus* Gyll., *Deutschii* Sahlb., *nitens* Lec., *azillaris*, *longiusculus* Mann.

This insect occurs in North America in widely separated localities (San Diego, Calif., *Le Conte*; Mt. Washington, N. H., *Austin*; Nova Scotia, *Harrington*, *in lit.* Northern Michigan and Lake Superior, *Schwarz*; Alaska, Sitka. Arctic Siberia. Arctic Europe, Britain, Germany. Pr. 1868, 380; Heyden, 42.

## HALIPLIDÆ.

53. *Haliplus ruficollis* DeG., *impressus* ‡ Kirby, *immaculicollis* Harris.

This species has a wide distribution. From the Southern and Middle States, northward through Canada to Hudson Bay and westward to New Mexico and the Rocky Mountains. General in Europe, passing over to Turkestan and western Siberia. T. iv, 385; Kirby, 66; Heyden, 53.

## DYTISCIDÆ.

*Obs.*—*Hydrovatus cuspidatus* Kunze.

Dr. Sharp says that the species known by this name in our literature is *pustulatus* Mels., and not the true *cuspidatus*. Sharp, 323.

54. *Cœlambus inæqualis* Fab., *punctatus* Say.

This species is a little variable in color ornamentation. It occurs here abundantly and generally throughout the Middle and Western States (Buffalo, N. Y.; Ottawa, Canada; Lake Superior, Michigan, Ohio, Illinois, Kansas, Colorado). Abundant in northern and cen-

tral Europe. Sh., 395; Turkestan, Heyden, 53; Algeria Wehnke (Sh.). T. iv, 387; var. *punctatus* is the form most commonly met with.

55. *C. impressopunctatus* Schall., *similis*, *picatus* Kirby, *nigrolineatus* ‡ Kirby, *4 lineatus*, Mann., *porosus* Gebl.

This species is apparently less abundant than the preceding. It occurs in Massachusetts, New York, Canada, Michigan, Illinois, Lake Superior, Hudson Bay region, Sitka. Europe. Asia Minor, northern and southern Siberia. T. iv, 389; Col. Am. 100; Sh. 403; Heyden, 54.

56. *Deronectes depressus* Fab., *rotundatus* Lec.

This species occurs in Canada, *Harrington*; New York, *Reinecke*; Michigan, *Schwarz*. Europe to 68° 20', in Lapland. S. iv, 392; Sh., 428.

57. *D. griseostriatus* DeG., ?(*catascopium*, *interruptus*, *parallelus* Say, *proster-nalis*, *suffusus* Sharp).

Thus constituted the species extends across the northern part of the continent from Labrador to Alaska (Labrador *Packard*, Hudson Bay region, *Kirby*; Alaska, California, Kansas, Lake Superior, *Le-Conte*; Michigan, *Schwarz*; New York, *Reinecke*. My specimens are from Colorado and Massachusetts. Alpine and northern Europe to 69° in Finland. Arctic Siberia (Dudinka). T. iv, 393; T. x, 277; Sh., 435; Heyden, 54.

58. *Hydroporus alpinus* Payk., var. *12-lineatus* Lec., ?*lævis* Kirby, var. *bo-realis* Gyll.

Occurs at Lake Superior. Canada; *lævis*, Hudson Bay region. Lapland and Norway to 68°. Arctic Siberia. T. iv, 391; Sh., 448; Heyden, 54.

59. *H. septentrionalis* Gyll., *scitulus* Lec.

Lake Superior (*LeConte*, *Schwarz*). The mountains and northern parts of Europe. Eastern Siberia, the Amur, Dauria. P. vii, 295; Sh., 449; Heyden, 54.

60. *H. rivalis* Gyll., *obesus* Lec., *congruus* Lec., *Sanmarki* Sahlb.

This species is described from California and from Colorado (Florisant at 8000 feet). Arctic Europe to 68° 50'. Central Europe. Arctic Siberia (Dudinka and Chantaika Rivers, affluents of the Jenisei, 69° 30' to 72°). Sh. 449; Heyden, 54.

61. *H. obscurus* Sturm.

This species is, so far, unknown here, but Sharp saw two specimens in Mr. Andrew Murray's collection said to be from North America. Northern and central Europe. Arctic Siberia (Chantaika River and Tschornaja Island). Sh., 459; Heyden, 55.

62. *H. fuscipennis* Kies.

Alaska. Northern Europe (Sweden, Finland, Germany). Chantaika River, Arctic Siberia. Sh., 461; Heyden, 55.

63. *H. glabriusculus* Aube.

Sharp refers a specimen from Massachusetts to this species as a variety, otherwise it is probably unknown here. "Lapland, Angora, eastern Siberia." Sh., 470.

64. *H. tartaricus* Lec., *nigellus* Mann.

Described from Lake Superior, but not known to have occurred there since. My specimens are from Montrose County, Colorado, at 10,000 feet altitude (*Bowditch*). Hudson Bay (*LeConte Cat.*). Arctic Siberia (the Jenisei from 69° 30' to 72°). Sh., 470; Heyden, 55; Mann., 1853.

65. *H. atriceps* Crotch, *morio* Sharp, *melanocephalus* Marsh ‡

This species occurs in the White Mountains, New Hampshire (*Sharp*). Finland to 69°. Scotland. Arctic Siberia (Obi, Jenisei). Sharp, 471; Heyden, 55.

66. *H. tristis* Payk., *varians* Lec., *subtonsus* Lec., *ruficapillus* Mann.

This species extends across the northern part of the continent from Massachusetts to Alaska (Vermont, Canada, Michigan, Lake Superior, Hudson Bay (*LeConte Cat.*). Northern Europe to 69° in Finland. Arctic Siberia (the island of Tschornaja); Kirg. Steppes. P. vii, 297; T. iv, 395; T. x, 278; Sh. 472; Heyden, 55.

67. *H. vittulus* Er., ? *striola* Gyll.

This species occurs in British Columbia (*fide* Sharp). Northern Europe. Asiatic Siberia, in the northern affluents of the Jenisei. Sh., 474; Heyden, 55.

68. *H. oblongus* Steph., *conoideus* Lec.

This species is not commonly found. Canada, Lake Superior (*LeConte*), Port Huron, Mich. (*Schwarz*), Vancouver. Northern Europe to 66° 20' in Finland. Arctic Siberia in the Kurej River. T. iv, 396; Sh., 485; Heyden, 54.

69. *Ilybius ater* DeG., *angularis* Lec.

This species is probably rare here, as I know of no one who has taken it. Middle States (Pennsylvania), *LeConte*. Europe (the mountainous parts and north to 63° 40' in Finland). West Siberia. T. iv, 411; T. x, 279; Pr. 1862, 521; Sh., 550; Heyden, 57.

70. *I. subæneus* Er.

(Hudson Bay; Canada) *fide* Sharp. Europe (Germany; France to 69°). Arctic Siberia (northern tributaries of the Jenisei). Sh., 552; Heyden, 57.

71. *I. angustior* Gyll., *picipes* Kirby.

Widely distributed, but infrequently recognized. Labrador, Hudson Bay region 54° to 65°. Canada, northern Michigan, Lake Superior, Kansas, Alaska. Germany. Sweden. Finland to 69°. Kamtschatka, the northern tributaries of Jenisei, southwestern part of western Siberia. Kirby, 72; T. iv, 411; T. x, 279; Sh., 556; Heyden, 57.

72. *I. fuliginosus* Fab.

North America (*fide* Sharp). Central and northern Europe to 64° in Finland. Southeastern west Siberia. Sh., 556; Heyden, 57.

73. *Agabus* (*Gaurodytes*) *congener* Payk., *ambiguus* Say, *discolor* Harris (T. x, 278), var. *lapponicus* Sahlb.

Thus constructed the range of this species is Pennsylvania, Massachusetts, Labrador (Caribou Island, *Packard*), Greenland, Hudson Bay. White Mountains, N. H. Central and northern Europe. Arctic and western Siberia. Sh., 512; Heyden, 56. "A variable species," *Sharp*.

74. *A. dissimilis* Sahlb., ? *longulus* Lec.

Specimens of this species were so determined by Dr. Sharp for Dr. Horn, although in his *Dytiscidæ* (p. 513) he is not quite certain of the distinctness of the species from congener *Payk*. Should the two species prove identical the distribution would be Europe; Siberia; Hudson Bay; Greenland; Labrador; and Lake Superior. Stupart's Bay, Hudson Straits, *Harrington*.

75. *A. confinis* Gyll., *bicolor*, *phæopterus* Kirby, *ovideus* Crotch (T. x, 278).

Kansas, Lake Superior (*LeConte*), Michigan (*Schwarz*), Canada (*Pettit*), Vermont, collected by Mr. C. Roberts; Hudson Bay (*Kirby*), Alaska. Sweden; Finland to 68°. West Siberia. T. iv, 418; Sh., 520; Heyden, 56.

76. *A. arcticus* Payk., *reticulatus* Kirby, var. *sibiricus* Sahlb.

Taken at 65° north latitude (*Kirby*), Labrador (*Le Conte*), northern Europe to 69° in Finland. Arctic Siberia (the Dudinka). T. v, 422; Sh., 526; Heyden, 56.

77. *A. nigroæneus* Er., *Erichsoni* Harold, *lutosus* Cr. (T. x, 279).

California, Kansas, Slave Lake, Lake Superior, Canada, Hudson Bay, central and northern Europe. Siberia (the islands and affluents of the Jenisei). T. v. 419; Sh., 529; Heyden, 56.

78. *A. tristis* Aube, var. *dubius* Mann., ? *atratus* Mann.

Occurs in New Mexico (*Snow*); Colorado (*Schwarz*); Lake Tahoe, California; Alaska; Arctic Siberia (the Dudinka). T. iv, 422; Sh., 531; Heyden. "This species varies a good deal in color," *Sharp*.

79. *Rhantus notatus* Fab., *sericans* Sharp (T. x, 279), *suturalis* Lac., *roridus* Mull.

This species has been found in Kansas (*Snow*, *Le Conte*), Montana (*Le Conte*), British Columbia. Europe. Western Siberia Pr. 1866, 366; Sh., 619; Heyden, 57; Nord., 22.

80. *R. bistriatus* Berg., *suturellus* Harr.

This species occurs in Massachusetts, Illinois, Kansas, at Lake Superior, Slave Lake, Hudson Bay. Central and northern Europe. E. and W. Siberia. T. iv, 409; Sharp, 620; Heyden, 57 (*suturellus* Harris). *Adspersus* Fab. is not a synonym of *bistriatus* Berg. *Sharp*.

Some other American and Eastern forms if not identical seem very close, viz., *sinuatus* Lec. and *Grapii* Gyll. scarcely differ, except that the latter is a little larger (Sh. 617).

81. *Colymbetes Paykulli* Er.

No reference to this species has been observed in our literature. Dr. Sharp (625) gives as its habitat "western North America," north Germany; Sweden; Finland to 68° 30'; Arctic Siberia (Fadjanowsk). "Excessively near seminiger *Lec.*, *inequalis* Horn;" *Horn in litt.* Saskatchewan River, B. C. Susanville, California.

*C. obscuratus* Mann. is possibly identical, the chief difference being that the transverse striolæ of the elytra are somewhat finer and denser (comparison by Mannerheim, 1853), quite a secondary character.

82. *C. Thomsoni* Sharp.

Lapland. Iceland (? Greenland). Sh., 628.



83. *Eretes* Sh., 628 (*Eunectes*), *sticticus* Linn.

This species is more extensively distributed than any known Dytiscide. Sharp gives its distribution as follows: "France, Corsica, Sardinia. Spain. Africa. Siberia. Japan. Formosa. China. Philippines. Timor. Sumatra. Java. Pulo Penang. Siam. India. Arabia. Mesopotamia. Canary Islands. Madeira. Cape Verde Islands. U. S. N. A. Mexico. Peru. Guadaloupe. Galapagos." Australia may, perhaps, be added. It is not known at many places in the U. S. A., but occurs in Kansas (*Snow*), Texas and at Vallecitas, California. T. iv, 386; Sh., 699; Turcomania, Heyden, 58.

84. *Hydaticus stagnalis* Fab., *cinctipennis* Aube, *modestus* Sharp, *americanus* Sh. (T. x 280)

As thus constructed this species varies in color ornamentation. It occurs in New York, Michigan, Illinois. My specimens (*modestus*) are from Wisconsin, Red River, *Sharp*. Northern Europe. Western Siberia. T. iv, 404; Sh., 650-52; Heyden, 59.

85. *H. lævipennis* Thomp.

Comparing this with *stagnalis* Dr. Sharp, l. c. says: "They are perhaps not distinct species," giving Red River [Manitoba], Sweden and Finland to 60° 30' as its habitat.

86. *Dytiscus marginalis* Linn.

Occurs in Canada and northern Michigan. Dr. Sharp has a specimen labeled by Castelnau "Am. Bor. int. mont. rocheuses," and found another in Murray's collection said to be from North America. Widely distributed in Europe to 68°. W. and E. Siberia. Japan. Sh., 641; Heyden, 58.

87. *D. circumcinctus* Ahr., *circumscriptus* Lac.

Dr. Sharp had specimens from Red River, [Manitoba]. Europe to 61° 50' north, in Finland. Northern Siberia. Sh., 642; Heyden, 58. *D. anxius* Mann. is possibly synonymous. It occurs in Oregon and Sitka. T. iv, 408; also in Canada and Hudson Bay region. *Horn, in litt.*

88. *D. dauricus* Gebl., *confluens* Say, *diffinis* Lec., *Franklinii* Kirby, *Ooligbukii* Kirby.

This species extends across the northern part of the continent from Maine to Alaska (Maine, Hudson Bay (*Le Conte Cat.*), Great Bear Lake River, Lake Superior, Michigan, Wisconsin, Kansas, Colorado (Pagosa), Alaska (Sitka). Kamtschatka; Dauria. T. iv, 407; P. 1868, 370-72; Sh., 643; Heyden, 58.

89. *Graphoderes fasciatocollis* Harris, *cinereus* Linn., *elatus perplexus* Sharp (T. x, 280).

Inhabits Pennsylvania (*here*), New York, Massachusetts, Michigan, northern California, Washington Territory, Red River, [Manitoba.] Europe. West Siberia. Turkestan. T. iv, 403; Can. Ent. xx, 62; Sh., 693-95; Heyden, 59.

## GYRINIDÆ.

90. *Gyrinus minutus* Fab.

This appears to be a northern species. Square Island, Labrador *Packard*; Hudson Bay region, *Kirby*; Lake Superior, Michigan, Washington Territory, from which I have specimens. Central and northern Europe Arctic, west and east Siberia (*Spirina*, the Chantanka River, Omsk). Pr. 1868, 372; Heyden, 60.

Obs.—*G. Rockinghamensis Zimm.* seems to differ only by having the underside entirely pallid, but is approached in this respect so closely by individuals of *minutus* as to render the separation opinionative. It is abundant from New York to Florida.

91. *G. marinus* Gyll., var. *dorsalis* Gyll., var. *opacus* Sahlb.

The variety *opacus* occurs in Greenland (Pr. 1868, 372), but further record of its occurrence in America has not been observed. Central and northern Europe. Many places in Arctic, east and west Siberia and Turcomania. Heyden, 60.

## HYDROPHILIDÆ.

92. *Helophorus granularis* Linn.

This species seems to have only a catalogue record in our literature. There are many varieties in Europe. It occurs in west Siberia; Mongolia; Turkestan. Heyden, 61.

93. *H. tuberculatus* Gyll., *scaber* Lec.

This species is "very abundant at Lake Superior," *Le Conte*. New York, Canada, Michigan, Wisconsin. Germany, northern Europe. Siberia (the Obi and Jenisei). Mongolia. P. vii, 358; Heyden, 61.

94. *Tropisternus apicipalpis* Chev.

This species "occurs in Arizona, the peninsula of California, and in Mexico," Horn, Can. Ent. xvii, 138. It also inhabits southern France.

95. *Hydrobius fuscipes* Linn., *seriatus insculptus, regularis* Lec. (P. vii, 372).

Very variable and widely distributed in temperate and boreal America. Alaska to Hudson Bay, southward to California; through the Rocky Mountains to New Mexico. On the Atlantic slope it extends south to Maryland and West Virginia, from which I have specimens. General in Europe. Kamtschatka, east and west Siberia. Turkestan. P. Am. P. xiii, 135; Heyden, 62.

96. *Sphæridium scarabæoides* Linn.

A specimen of this species was once taken in Canada (C. 73), but its subsequent occurrence is unknown. It is quite common throughout Europe, and is found in many places in Turcomania, east and west Siberia. Heyden, 63; Heyden, 1885.

97. *Cercyon*.

The species of this genus are mostly neglected by collectors in this country, as it has not yet been studied by any of our systematists, hence the record of the distribution of the species is very meagre, and fails to furnish more than a remote approximation.

98. *C. flavipes* Fab.

Michigan (Detroit; Marquette), *Schwarz*. I take it here in Pennsylvania. Europe. West Siberia (Kurejka). Heyden, 63.

99. *C. melanocephalum* Linn.

Europe. Asia (Iekatrinburg, in eastern Ural). Heyden, 63.

100. *C. centrimaculatum* Sturm., *Mundum* Mels.

District of Columbia, *Ulke*; Pennsylvania, Michigan (Detroit and Marquette), *Schwarz*. Central and northern Europe. P. vii, 374.

101. *C. pygmæum* Ill.

Ottawa, Canada, *Harrington*; Vermont, *Roberts*. Europe. Vorogova, on the Jenisei, in Arctic Siberia, west Siberia. Heyden, 63.

102. *C. unipunctatum* Linn.

Michigan, *Schwarz*; Canada, *Harrington*. I have seen it here several times in great abundance under carrion, or putrid substances. Europe. Asiatic Siberia (Kolmogorova), west Siberia. Heyden, 63.

103. *C. anale* Payk., *maculatum* Mels.

Pennsylvania, Michigan. Europe. East and west Siberia on the Obi and Jenisei. P. vii, 374. Heyden, 63; Nord., 22.

## PLATYPSYLLIDÆ.

104. *Platypsyllus castoris* Rits.

The systematic position of this curious insect seems to be now finally settled. "First discovered on the American beavers in the Zool. Gardens at Amsterdam. It is now known to inhabit the beavers of Texas, Nebraska, the Hudson Bay region, Alaska, and those taken in France at the mouth of the Rhone (*Horn*)."  
T. xv, 23-26; T. x, 114 and plate (*Le Conte*).

## LEPTINIDÆ.

105. *Leptinus testaceus* Mull., *americanus* Lec., Pr. 1866, 367; T. x, 113; C. 77.

"Inhabits with field mice and other small rodents." Taken at Keokuk, Iowa, by Dr. Brendel; Washington (*Ulke* and *Schwarz*), Philadelphia (*Ryder*). My frequent searchings for this species have resulted negatively. It occurs in Sweden, Germany and France.

## SILPHIDÆ.

106 *Necrophorus vespilloides* Hbst., *pygmæus*, *hebes* Kirby, *defodiens* Mann., *conservator* Walk., *mortuorum* Fab., *pollinator* Lec.

The individuals of this species vary greatly in color ornamentation. It extends across the continent from Nova Scotia to Alaska (Canada, Michigan, Lake Superior; var. *pollinator*, from Washington and Oregon; has the antennæ entirely black). Under the name *mortuorum* it inhabits east Siberia to Kamtschatka, and in Amurland. Europe. Pr. 1866, 367; T. viii, 234 and 314; Col. Am. 126; Heyden, 87; Heyden, 1886.

107. *Silpha lapponica* Hbst., *caudata* Say, *tuberculata* Germ., *californica* Mann., *granigera* Chev.

This species is widely distributed in northern and western America (Labrador commonly, *Packard*). Hudson Bay region (*Lec. Cat.*). Canada; Green Mountains, Vermont; New York, Michigan, Lake Superior, Nevada, Idaho, Colorado, Kansas, Texas (El Paso), New Mexico, California (San Diego), Oregon, Washington; Alaska. Northern Europe. Arctic and boreal Siberia from Ochotsk to Nikolaevsk at the mouth of the Amur. P. vi, 278; T. viii, 238; Col. Am. 124; Heyden, 86.

108. *S. opaca* Linn.

This species has occurred at Lake Mono, California (*Horn*), Hudson Bay Territory, the borders of the McKenzie and Slave Rivers;

White, in Richardson's Arctic Searching Expedition, p. 474 (*Lec.*). Europe. Throughout Siberia; Amurland. Pr. 1866, 367; T. viii, 241; Col. Am., 124; Heyden, 85.

Obs.—*S. atrata* Lin., a species found throughout Europe and in western Siberia, which, when introduced here, failed to establish itself.

109. *Pteroloma Forstroemi* Gyll.

Alaska. Arctic and western Siberia (in Obi). Caucasus; Sweden; Germany. T. viii, 245; Heyden, 85.

110. *Sphærites glabratus* Fab., *politus* Mann.

"Occurs from California to Alaska (*Horn*)."  
Boreal and Alpine Europe. T. viii, 247.

111. *Colo bidentatum* Sahlb.

Massachusetts, *Blanchard*; New York, *Ulke*, are the localities of occurrence for this probably introduced European species. Horn, T. viii, 217.

### PSELAPHIDÆ.

112. *Bryaxis* [*Rybaxis*] *sanguinea* Leach, ♂ *longicornis* Den.

This is stated to occur in Massachusetts, Michigan and Illinois. T. viii, 181. Europe. Siberia. Turkestan (Samarkand). Heyden, 84,

### STAPHYLINIDÆ.

Of this extensive family only certain sections have yet been more than cursorily considered by American writers, and but few of the genera in any sense exhaustively. In the great tribe ALEOCHARINI the more common or conspicuous insects have alone been touched. The twenty-nine species described by Lieut. Casey added to those in Henshaw's Catalogue increases the number in this tribe to 125, while in so small a country as Britain 325 are enumerated by Dr. Sharp. In the family we have less than 1000 described species, more than one-tenth of which also occur in Europe and Asia.

113. *Hoplandria pulchra* Kraatz.

Common on the shores of the Indian River, Florida, *Schwarz*  
Central and southern Europe

114. *Homolota plana* Gyll.

Garland and Veta Pass, Colorado, at 9500 feet, also Florida, under pine bark, *Schwarz*. Exrope. Northern Siberia along the Jenisei. Heyden, 66; from north lat. 68° 40' to 68° 35'; Nord., 23; east Siberia, *Solsky*.

115. *H. analis* Grav.

Michigan, *Schwarz*; Massachusetts, *Blanchard in litt.* Pennsylvania (*here*). Europe. Arctic, west and east Siberia. Heyden, 66; Nord., 23; Amurland, Heyden, 1885.

116. *H. lividipennis* Mann.

This species occurs in Pennsylvania (*here*), Ohio *Dury*; New York, *Reinecke*; Canada, *Harrington*; Michigan and La Veta, Col., *Schwarz*; Lake Superior, *LeConte*; Kansas, *Snow*. Europe.

117. *H. picipennis* Mann.

Sitka. Europe.

118. *H. sordida* Marsh.

Massachusetts. *Blanchard, in litt.* Europe.

119. *H. fungi* Grav

Found by Mr. Schwarz at Veta Pass, Col., at 9200 feet. Common in Europe and Siberia. Heyden, 66; Nord., 23.

120. *Tachyusa pygmæa* Sachse.

The name, with Georgia as a doubtful locality, is the only reference to this species that has been observed. It is in European catalogues.

121. *Aleochara lata* Grav.

Occurs everywhere east from the Mississippi and in Canada. Europe.

122. *A. fuscipes* Grav., *lustrica* Say.

This species as well as *lata* occurs here in Pennsylvania; Ohio, *Dury*; Europe. West Siberia (Barnaul). Heyden, 64.

123. *A. nitida* Grav., *verna* Say, *anthomyiæ* Sprague, Am. Entomol. ii, 370.

This species is widely distributed, and abundant from Florida to Canada, and westward to the Rocky Mountains, through which it extends to Colorado and New Mexico. General in Europe, and occurs at Lake Baical in east Siberia. Heyden, 64; Amurland, Heyden, 1885.

124. *Dasyglossa prospera* Er.

Massachusetts, *Blanchard*; determined by Fauvel. Garland and Veta Pass, Col., *Schwarz*. France. Germany. Arctic Siberia (Kolmogorovo; Spirina). Amurland, Heyden, 1885.

125. *Bolitochara gracilis* Sachse.

Massachusetts, *Blanchard, in litt.* Europe.

126. *Oligota parva* Kraatz.

Massachusetts (*Blanchard fide Fauvel*). Found about stables. Germany. Italy. Britain.

127. *Gyrophæna affinis* Sahlb.

Massachusetts, *Blanchard, in litt.* East and west Siberia. Heyden, 68.

128. *Gymnusa brevicollis* Grav

"Canada and the Lake Superior region," C. 94. Michigan, *Schwarz*. P. Am. P., xvii, 631; Massachusetts, *Blanchard, in litt.* Central Europe. Sweden. West Siberia. Heyden, 68.

129. *G. variegata* Kiesw.

Michigan, *Schwarz* l. c. Central Europe. Sweden.

130. *Myllæna dubia* Grav.

Michigan, *Schwarz* l. c., 648. Massachusetts, *Blanchard*. Europe. West Siberia (Tobolsk). Heyden, 68.

131. *M. minuta* Grav.

No locality observed. Europe. Arctic Siberia (Kolmogorovo). Heyden, 68.

132. *M. infuscata* Kraatz.

Massachusetts, *Blanchard*. Europe.

133. *Acylophorus pratensis* Lec.

A specimen of this, the type, occurred in Kansas. Fauvel (Faun. Gallo-Rhen. iii, 542) places it as a synonym of *glabricollis* Grav., a common European species. Dr. LeConte (P. Am. P. xvii, 388), without comparing specimens, does not fully assent to this, but thinks Fauvel's remarks apply better to some varieties of *pronus* Er. Common on both coasts. N. S., 34.

134. *Quedius fulgidus* Fab., *iracundus* Say, *groenlandicus* Zett., *erythrogaster*, *melanocephalus* Mann., *silvicola* Casey.

These names are mostly indicative of color varieties. The species extends across the northern part of the continent from Greenland to Alaska, and as far south as northern Georgia and middle California, though south from New York it is not commonly met with. Europe. West Siberia (Barnaul). T. vii, 158; Heyden, 71.

135. *Q. lævigatus* Gyll., *plagiatus*, *longipennis* Mann., *rufipennis* Maek.

Likewise variable in color. "Occurs from Alaska to Oregon, Kansas, Canada and Pennsylvania," *Horn*. I take it here, and have it from Illinois and Michigan; Massachusetts, *Blanchard*; Veta Pass, Col., at 9400 feet *Schwarz*. Northern Europe. East Siberia (Irkutsk). T. vii, 163; Heyden, 71.

136. *Q. molochinus* Grav.

Common here; "occurs from New Hampshire to Vancouver and Sitkha, and as far south as northern Georgia," *Horn*. It was likewise taken by Mr. Schwarz at Veta Pass, Col., at 11,000 feet. General in Europe, Boreal Siberia. T. vii, 164; Heyden, 71.

137. *Q. sibilimbatus* Maek.

"Occurs from Alaska to Fort Simpson, on the McKenzie River, and the Lake Superior region," *Horn*. Michipicoton River (*Schwarz*). Eastern Siberia *Mannerh.* T. vii, 160. Heyden, 71.

138. *Staphylinus erythropterus* Linn., *cæsareus* ‡ Lec., *cæsareus* ‡ Schwarz.  
(List of Coleopt. of lower Mich.)

One specimen occurred at Detroit, Mich. P. Am. P. xvii, 599; T. vii, 190. Common in Europe. Northern and west Siberia. Heyden, 72.

139. *S. cæsareus* Cederh., *ornaticauda* Lec.

A single specimen was taken in Canada by Mr. Ulke, and another near Ottawa, Canada, by Mr. W. H. Harrington (T. vii, 191; Can. Ent. xvi, 46). These two fine European species have evidently been introduced, whether to perpetuate themselves here the future will determine. Mr. Harrington took the specimen June, 1883, and writes that it has not occurred since (1889).

140. *Ocypus ater* Grav.

This species occurs here, and in many places from New Jersey to Kansas, *Snow*, and northward to Canada and Nova Scotia (*Harrington*). Europe generally.

**PHILONTHI.** This tribe has recently been exhaustively studied by Dr. Horn, and the American synonymy and distribution of the species as given in his monograph admits of little in addition.

141. *Philonthus æneus* Rossi, *politus*, *mandibularis* Kirby, *Harrisi* Mels., *angulicollis* Mot.

"Nearly cosmopolitan," *Horn*. Abundant here in Pennsylvania; Ohio, Michigan, New York, Massachusetts, Canada to Nova Scotia, Hudson Bay and Lake Superior, Wisconsin, Kansas, Colorado. Europe. Arctic, east and west Siberia; Amurland; Dauria. T. xi, 181. Heyden, 73; Col. Am., 121.

142. *P. umbratilis* Grav.

This species "occurs in the eastern Atlantic region, Massachusetts, New Jersey and Lake Superior," *Horn*; Michigan. Europe. West Siberia, Tobolsk. T. xi, 184. Heyden, 73.



143. *P. politus* Fab.

Unknown in our collections as native, but placed among the species of our fauna by Dr. Horn on the assurance of Fauvel having a specimen from North Carolina, and another from "Amer. Bor." Europe. Barnaul, west Siberia. Turcomania. T. xi, 186. Heyden, 74.

144. *P. atratus* Grav.

Of this species Dr. Horn writes, "I have seen but two specimens, a male without locality, and a female from Hudson Bay, both in the cabinet of Dr. LeLonte." As it occurs in northern Siberia it probably will be found abundantly throughout Boreal America. Europe. East and west Siberia. Turkestan. T. xi, 187. Heyden, 74.

145. *P. debilis* Grav.

This species is found here. "It occurs everywhere in the eastern Atlantic region, extending as far west as Kansas and Nebraska," Horn. Garland and Veta Pass, Col., at 9400 feet, Schwarz; Santa Fe Cañon, New Mexico, Snow. Europe. Africa. West Siberia. T. xi, 194. Heyden, 73.

146. *P. varians* Payk., var. *agilis* Grav., *niger* Mels.

(Var. *agilis* is the American form, as determined by Fauvel. Nearly cosmopolitan. In the northern portions of the Atlantic region, extending westward to Washington and California) Horn. Melsheimer took it in Pennsylvania. Europe. Both forms occur in west Siberia. T. xi, 195; Heyden, 75.

147. *P. longicornis* Steph., *scybalarius* Nord.

Cosmopolitan. Dr. Horn has seen specimens "from nearly every region in our fauna, except Arizona." Nova Scotia, Harrington, *in litt.* Santa Fe Cañon, New Mexico, Snow. Europe. Koultoe, east Siberia. T. xi, 196; Heyden, 75.

148. *P. discoideus* Grav., *ruficornis* Mels.

This species, according to Dr. Horn, occurs everywhere in the Atlantic region, extending to Nevada and Arizona. All Europe and the circum-Mediterranean region. Turkestan. P. xi, 196; Heyden, 73.

149. *P. thermarum* Aube.

Only three specimens were known by Dr. Horn to have been taken in our fauna, collected in Missouri and the District of Columbia, Massachusetts, Blanchard, *in litt.* Europe. T. xi, 196.

150. *P. quisquiliarius* Gyll.

Is said by Fauvel to occur in California, but Dr. Horn never had seen a native specimen. Europe. Vorogova, on the Jenisei, in Arctic Siberia; Barnaul, west Siberia. T. vi, 197; Heyden, 74.

151. *P. fulvipes* Fab.

"Occurs in Canada, Massachusetts, Michigan, New York," (*Horn*) New Jersey. Europe. West Siberia. T. xi, 200; Heyden, 75.

152. *P. micans* Grav.

"Occurs in the eastern United States from Massachusetts to Michigan," *Horn*; Florida, *Schwarz*; Canada, *Harrington*. Europe. Tobolsk, west Siberia; Turkestan. T. xi, 204; Heyden, 75.

153. *P. cyanipennis* Fab., *cæruleipennis* Mann.

This beautiful coleopter is found abundantly in living fungi; according to Dr. Horn it occurs over the entire eastern United States, but had not been seen from west of Kentucky. Canada, *Harrington*. It seems common in many countries of Europe. Eastern Siberia; Amurland; Dauria. T. xi, 208; Heyden, 73.

154. *P. sordidus* Grav.

"Occurs in Canada, Michigan, Colorado, Vancouver and California," *Horn*. This species is found here in Pennsylvania. Europe. Jenissiesk, west Siberia. T. xi, 209; Heyden, 73; Amurland, Heyden, 1885.

155. *P. cephalotes* Grav.

According to Dr. Horn this species is scarcely separable from *sordidus*, and is nearly cosmopolitan. In our fauna he had seen only a few specimens from Massachusetts and the Middle States. Kolmogorovo and Lebedevo, Arctic Siberia; west Siberia. T. xi, 210; Heyden, 73; Amurland, Heyden, 1885.

156. *P. ventralis* Grav., *anthrax* Grav.

"Occurs in Michigan, Missouri and Nevada," *Horn*; New York, *Reinecke*. Europe. Africa. Siberia. T. xi, 211; Heyden, 73.

157. *P. nigrutilus* Grav., *aterrimus* Grav., *picipennis* Maek., *punilus* Mann.

"Occurs from Vancouver to Arizona, Lake Superior and the New England States," *Horn*. Sitkha and Kadjak. Florida and Veta Pass, Col., at 9200 feet, *Schwarz*. It occurs here very abundantly on the borders of stagnant ponds, and in marshy places. Europe. Arctic, west and east Siberia. Turkestan. T. xi, 217; Heyden, 74. When *nigrutilus* is mentioned in our literature it is

sometimes uncertain whether it or *microphthalmus* were in view, a very closely allied species with which, till now, it has been mostly confused.

158. *Actobius cinerascens* Grav.

This species is found here in Pennsylvania occasionally on the banks of streams; "from Michigan to Florida," Horn; Massachusetts, Blanchard. Europe generally. T. xi, 225.

159. *Cafius sericeus* Holme.

This species common in Europe and the basin of the Mediterranean, has occurred in America. The specimens seen by Dr. Horn were without certain locality, but possibly from Coney Island, near New York. T. xi, 238.

160. *Xantholinus fulgidus* Fab.

This species has been introduced from Europe, where it is common. It seems to be rare here, the only native specimen I have seen was taken by myself in this city on the street. T. viii, 172. Taken by Mr. F. Blanchard in Massachusetts in a green-house; Blanchard, *in litt.* and in the vicinity of New York City (Horn).

161. *X. punctulatus* Payk.

This species is said by Fauvel to occur in North America, but native specimens had not been seen Le Conte. Europe. Tobolsk, west Siberia. T. viii, 172; Heyden, 75.

162. *Leptacinus batychrus* Gyll., *flavipes* Lec.

"Middle and Western States, rare," Le Conte; Florida, rare, Schwarz. Massachusetts, Blanchard. Europe. Lake Baical, east Siberia. N. S. 41; T. viii, 168; Heyden, 75. Amurland, Heyden, 1885.

163. *L. parumpunctatus* Gyll.

This European species, according to Fauvel, occurs in North America. T. viii, 169.

164. *Dianous cærulescens* Gyll., *chalybeus* Lec.

My specimens are from Marquette, Mich., where the type of *chalybeus* was found. Mr. Harrington has it on his list of Ottawa, Can. Coleoptera, and Mr. Blanchard has taken it in Massachusetts. N. S. 49. Europe.

165. *Stenus bipunctatus* Er., *comma* Lec.

This species is widely distributed. It occurs here abundantly among herbage near water. I have specimens from Vancouver

Island, B. C.; Ohio and Kentucky, *Dury*; Washington Territory, *Casey*; "Middle and Western States; not rare," *Le Conte*. N. S. 50; *Casey*, 14. Europe. Numerous places in west Siberia. Heyden, 78.

166. *S. junio* *Fab.*

This species extends across the northern part of the continent from Vermont to Vancouver Island, but is not recorded southward from New York. Europe. Arctic, east and west Siberia. *Casey*, 25; Heyden, 77.

167. *S. pumilio* *Er., atomarius* *Casey.*

The synonymy in this and the species of *Stenus* that follow charged to Mr. *Casey* is due to Mr. A. Fauvel, to Mr. F. Blanchard (T. xiii, p. xiii), "Cambridge, Mass.; Detroit, Mich.," *Casey*. Europe, Germany. Siberia. Kurejka. Heyden, 78.

168. *S. nanus* *Steph., pusio* *Casey.*

"Massachusetts; Canada; Lake Superior," *Casey*. Europe. Arctic and eastern Siberia. Heyden, 78; *Casey*, 82.

169. *S. humilis* *Er., mammops* *Casey.*

This species extends across the continent from Massachusetts to British Columbia and southward through the Rocky Mountains to New Mexico. Europe generally. Arctic and Middle Siberia in the basin of the Jenisei; Amurland, *Casey*, 98; Heyden, 78. Heyden, 1885.

170. *S. canaliculatus* *Gyll.*

Massachusetts, Lake Superior, Canada. Europe in general. W. Siberia along the Irtysh and Jenisei. *Casey*, 115; Heyden, 78.

171. *S. congener* *Maekl.*

European authorities place this as a synonym of *canaliculatus*, but Mr. *Casey* says they are "very distinct." *Casey*, 114. It occurs in Alaska and Siberia. If Mr. *Casey's* opinion is confirmed it may perhaps lead to a modification of the European and Asiatic distribution given under *canaliculatus*.

172. *S. morio* *Grav., subgriseus* *Casey, ? [enodis* *Casey.]*

California, British Columbia, *Casey*, 128; Alameda, Garland and Veta Pass, Col., at 9200 feet, *Schwarz*. Europe. Arctic Siberia (the Jenisei and Obi). Heyden, 78; Amurland, Heyden, 1885.

173. *S. tarsalis* *Ljungh*, *reconditus* Casey.

Mr. Casey doubts this synonymy, Bull. vi, 261, Calif. Acad. Sci. This species occurs in Massachusetts, Lake Superior and Iowa (*Casey*, 174). Ottawa, Canada, *Harrington*. Taken by Mr. Schwarz at Alameda, Garland and Veta Pass, Col., at 9400 feet. Europe. W. Siberia. Turkestan. Heyden, 78.

174. *S. argus* *Grav.*, *ageus* Casey (Schwarz and Ulke to Blanchard).

Massachusetts. Europe. Siberia (at the mouth of the Jenisei). Heyden, 78.

175. *S. alpicola* *Fauv.*

North America. Europe (Switzerland, Redemont, the Pyrenees).

176. *S. sibiricus* *Sahlb.*

Alaska. Arctic and east Siberia. Heyden, 78.

177. *Lithocharis ochracea* *Grav.*

This and *obsoleta* have probably been introduced from Europe, as they live about stables. Occurs in Michigan, *Schwarz*; Massachusetts, *Blanchard*.

178. *L. obsoleta* *Nord.*

My native specimens of this and the preceding species are from Mr. F. Blanchard, Massachusetts. Ottawa, Canada; *Harrington*, *in litt.*

179. *Pæderus riparius* *Fab.*

The occurrence of this species in North America is not yet well established, but is quite possible, as it occurs in Arctic, west and east Siberia and Amurland. Proc. Bost. Soc. Nat. Hist. xix, 6; Heyden, 77.

180. *Hypocyptus longicornis* *Payk.*, *Ziegleri* Lec.

*Ziegleri* was described (N. S. 30) from a specimen found at York, Pa.; Massachusetts, *Blanchard*. Europe. T. vi, 86 and 124.

181. *Tachinus pallipes* *Grav.*, *frigidus* Er.

This species occurs here in Pennsylvania abundantly. "Pennsylvania to Canada, Alaska and California," *Horn*, T. vi, 101. Central and northern Europe. Col. Am. 122.

182. *T. circumcinctus* *Mackl.*, *basalis* Er.

Occurs in Canada; Michigan, Kansas, Vancouver, Alaska, l. c. 102. Boreal Russia; Ural; eastern Siberia (the affluents of the Jenisei and Amur). Heyden, 69.

183. *T. instabilis* Maek., *apterus* Maek., *arcticus* Mots.

Alaska. The islands at the mouth of the Jenisei. T. vi, 101 and 124; Heyden, 69; Col. Am. 121 with plate. Fauv. 1875; Catalogue, 38.

184. *T. elongatus* Gyll.

This species, according to Mannerheim, occurs in Alaska (T. vi, 102). Central and northern Europe. East Siberia; Tobolsk. Heyden, 69; Mann., 1843.

185. *Tachyporus jocosus* Say, *arduus* Er.

I take this as well as the two following species in early spring on the underside of stones in fields. It is generally distributed throughout the central and northern portions of the Atlantic region, extending to Colorado and New Mexico. Europe (Finland). W. Siberia. T. vi, 104; Heyden, 69.

186. *T. chrysomelinus* Linn., *acaudus* Say, *maculicollis* Lec.

This species has the same general distribution in America as *jocosus*. Europe throughout. Various places in Arctic, west and east Siberia. Turkestan and Bokara. T. vi, 104; Heyden, 69.

187. *T. brunneus* Fab., *nitidulus* Fab.

Probably cosmopolitan. Occurs over our entire country, including California; also common in Europe and northern Africa. T. vi, 105. Veta Pass, Col., at 9400 feet, *Schwarz*. Various places in the basin of the Jenisei in eastern Siberia. Heyden, 70.

188. *T. scitulus* Er., *macropterus* Steph.

Cincinnati, Ohio, *Dury*; Louisiana, one specimen, *Horn*. Common in Europe. Along the Jenisei; Amurland; Turkestan. T. vi, 105; Heyden, 70.

189. *Cilea silphoides* Linn.

This pretty little species occurs in Massachusetts, New York, Michigan, the Lake Superior region and various places in the Northern States. Europe generally. T. vi, 106.

190. *Conosoma littoreum* Linn.

Occurs at Cincinnati, Ohio, *Dury*; upper and lower Michigan, *Schwarz*; Massachusetts and Canada, *Horn*. Nova Scotia, *Harrington*, in litt. Europe. Along the Jenisei in west Siberia. T. vi, 109. Heyden, 70.

191. *C. pubescens* Payk.

Michigan and Florida, *Schwarz*; Massachusetts, *Blanchard*; New York to Louisiana, *Horn*. I take this species in fungus and about the base of dead trees. Europe. W. Siberia (places on the Jenisei). T. vi, 111. Heyden, 70.

192. *Bolitobius cingulatus* Mann.

This, as well as all our species, lives on and in living fungi. Occurs in Pennsylvania, Massachusetts, Michigan, Canada, Oregon, British Columbia, Alaska. Europe. T. vi, 116. The thorax in this species varies from black to rufous.

193. *B. pygmæus* Fab., *3-maculatus* Say, *venustus*, *binotatus* Mels., *angularis* Sachse, var. *biguttatus* Steph.

I take this species and the following abundantly. It occurs from Florida to Canada; Michigan; Veta Pass, Colorado, at 9200 feet, *Schwarz*; British Columbia. Europe. East and west Siberia. T. vi, 117. Heyden, 70.

194. *B. 3-notatus* Er., ? *pæcilus* Mann.

I take this species here, in Ohio, West Virginia and New Jersey. It extends from the District of Columbia westward to the Mississippi, and northward to Canada and Lake Superior; Vancouver; Alaska. Europe. T. vi, 118.

195. *Mycetoporus splendidus* Grav., *americanus* ‡ Horn, *inquisitus* Casey.

This species occurs in Pennsylvania, Michigan, the White Mountains, N. H., *Blanchard*; Canada; Lake Superior, Veta Pass, Col., at 9200 feet, *Schwarz*; British Columbia, *Crotch*. Europe. Arctic, east and west Siberia. T. vi, 122; Heyden, 70.

196. *Olisthærus megacephalus* Zett., *laticeps* Lec.

Occurs in Canada; the Lake Superior region (*Le Conte*, *Schwarz*); Alaska, Kenai (*Mann*, 1853); Sweden; Hungary; Arctic and eastern Siberia. C. 101; L. S. 219 and 239; Heyden, 84; Fauv., 24.

197. *O. substriatus* Gyll., *nitidus* Lec.

Found at Eagle Harbor, Lake Superior, *Le Conte*; the islands, Michipicoton and Isle Royal, L. S. *Schwarz*; Massachusetts, *Blanchard*. Sweden. Germany. France. Arctic and east Siberia; *omnia*, l. c.

198. *Pseudopsis sulcata* Newm.

The species known in our literature as *P. sulcata*, and found abundantly in Canada, Michigan and the shores and islands of Lake

Superior; is said by M. A. Fauvel to slightly differ from the European species, and he has described it under the name *columbica*. Fauv., 26.

199. *Oxytelus sculptus* Grav., *mærens* Mels

This species occurs here abundantly; according to Dr. LeConte its distribution is the Southern, Middle and Western States and Vancouver, B. C., Massachusetts, *Blanchard, in litt.* Europe. Siberia. T. vi, 235; Heyden, 80.

200. *O. rugosus* Fab., *basalis* Mels., *rugulosus* ‡ Harris.

This species is likewise found here in Pennsylvania, also in Massachusetts and Canada; Nova Scotia, *Harrington, in litt.* Europe. Arctic and middle Siberia. T. vi, 235; Heyden, 80. Amurland, Heyden, 1885.

201. *O. nitidulus* Grav., ? *rugulosus* Say.

Massachusetts, *Blanchard, in litt.*; Southern, Middle and Western States, *LeConte*; Garland and Veta Pass, Col., at 9400 feet, *Schwarz*. Europe. Various places in Arctic, west and east Siberia to Turkestan. T. vi, 237; Heyden, 80.

202 *O. depressus* Grav.

Dr. LeConte found one pair of this common European species in Indiana; its further occurrence has not been observed. T. vi, 237.

203. *Trogophlæus memnonius* Er.

This species is very abundant here in the mud on the margins of swamps and ponds. Massachusetts, *Blanchard*; Texas, *Belfrage*; Florida and Veta Pass, Col., *Schwarz*. Europe. Egypt. T. vi, 247.

204. *T. corticinus* Grav., *fulvipennis* Fauv.

Texas, *Belfrage*; Garland and Veta Pass at 9200 feet, *Schwarz*. Europe. Various places in west Siberia. Heyden, 81.

205. *T. subtilis* Er.

This European species, according to Dr. LeConte, occurred in the Western and Southern States. T. vi, 246.

206. *Coprophilus striatulus* Fab.

Several specimens of this European species were taken in Canada by Mr. Pettit, and placed in Dr. LeConte's collection (T. v, 170). "In sculpture this species resembles *Oxytelus rugosus*, but is .25 inch. long, with the mouth parts, antennæ, the tip of the abdomen and feet brownish." Fauvel, 93.



207. *Porrhodites fenestralis* Zett., *brevicollis* Maek.

Found in Alaska, Sitkha, Kenai, *Maeklin*; British Columbia, *Le Conte*; Michipicoton River, Lake Superior, *Schwarz*. Lapland. Germany. Fauvel, 60. Siberia (at the mouth of the Jenisei and some of its eastern tributaries. Heyden, 82.

208. *Geodromicus nigrita* Mull., *verticalis* Say.

One of the varieties of *plagiatus* Er. It is common here along rocky streams, inhabiting between the layers of stone or shale. It occurs from Georgia to Canada; Mount Washington, N. H.; Lake Superior; Kansas, *Snow*. In Europe *plagiatus* has been divided into near a dozen named varieties; var. *nigrita* also occurs in Arctic Siberia. Heyden, 81; Fauvel, 90.

209. *Acidota crenata* Fab., *seriata* Lec.

This species is abundant on the shores and islands of Lake Superior (*Le Conte*, *Schwarz*), Michigan, Canada; Massachusetts, *Blanchard*. Central and northern Europe. Siberia (at the mouth and in the valley of the Jenisei). Heyden, 82; Fauvel, 64; N. S. 55.

210. *A. quadrata* Zett., *patruelis* Lec., *Frankenhauseri* Maek.

Alaska, rare, *Maekl.*; north shore of Lake Superior, *Le Conte*; Michipicoton River, *Schwarz*. Lapland. Boreal Asiatic Ural. N. S. 56; Heyden, 82; Fauvel, 65.

211. *Arpedium tenue* Lec.

"Marquette, Mich., *Schwarz*; Lake Superior; British Columbia, *Le Conte*; Lapland and Asiatic Siberia, *Fauvel*. An alate species. Fauvel, 63; N. S. 55.

Var. *brunnescens* I. *Sahlb.*, *Gyllenhali* Zett. Found at the Michipicoton River, Lake Superior, *Schwarz*. Lapland. The mouth of the Jenisei and several places in Arctic Siberia. Heyden, 82; Fauv., 63. The variety is apterous, and is considered by Fauvel a mere variation of *tenue* not worthy of racial distinction.

212. *Amphichroum canaliculatum* Er.

According to Fauvel this European species occurs in California, Fauvel, 76, but in more recent letters to Dr. Horn admits the California specimens to be a distinct species = *A. maculatum* Lec.

213. *Orochares angustata* Er.

One specimen was taken by Mr. F. Blanchard near Lowell, Mass., found in winter in ice on an inundated meadow. Germany. France.

214. *Olophrum rotundicolle* Sahlb., *convexicolle* Lec.

Found at Eagle Harbor, Lake Superior, and Michipicoton Island and River (*LeConte, Schwarz*). Germany. Finland. Lapland. Described and figured by LeConte, L. S. 221; Fauvel, 79.

215. *Pycnoglypta lurida* Gyll.

The American distribution of this species according to Fauvel is "British Columbia, *Crotch*; Lake Superior, Michipicoton River, Bachewauung Bay, *Schwarz*; Massachusetts, *LeConte*; New Jersey, *Schmelter*;" Cincinnati, Ohio, *Dury*. Europe (Germany northward to Lapland). Siberia (about the mouth of the Jenisei). Fauvel, 41; Heyden, 84.

216. *Homalium strigipenne* Maek.

"Alaska, Sitkha, Kadjak, *Maek.*; San Diego and Mariposa, Cal., *Thevenet*." Amurland, Fauvel, 46; Heyden, 83.

217. *H. lapponicum* Zett., *planipenne* Maek. (*Argus* Lec. C. 103)

"Alaska, Sitkha, Kenai, *Maek.*; Colorado, Michigan at Marquette, and Gargantau, *Schwarz*; Massachusetts, *Blanchard*; Lake Superior, *LeConte*;" Ottawa, Canada, *Harrington, in litt.* Central and northern Europe. West Siberia on the Jenisei and Irtysh. Fauvel, 50; Heyden, 83.

218. *H. pusillum* Grav., *laesicolle* Maek.

This species has occurred at various places. "Sitkha, *Maek.*; California, *Crotch*; Trenton Falls, N. Y., *Schwarz*;" Veta Pass, Col., at 9400 feet, *Schwarz*. Europe. Fauvel, 51.

219. *H. foraminosum* Maek., *laticolle* Kraatz, *clavicorne* Mots.; ? *lagopinum* I. Sahlb.

Sitkha, *Maek.*; taken by Mr. Schwarz at the Michipicoton River and at Detroit, Mich.; also Veta Pass, Col., at 9200 feet. Central and northern Europe. On the Angara River and around Lake Baical, east Siberia. Fauvel, 53; Heyden, 82.

220. *H. rufipes* Fourc., *florale* Er.

Found at the Michipicoton River and Detroit, Mich., *Schwarz*; Ottawa, Canada, *Harrington, in litt.*; Pennsylvania, *Ziegler*. Europe. Lake Baical, east Siberia. Fauvel, 47; Heyden, 83.

221. *H. rivulare* Payk.

This European species occurs, according to Fauvel, in California. Fauvel, 55.

222. *Anthobium sorbi* Gyll.

Occurs in Greenland. Central and northern Europe. Fauvel, 39.

223. *Protinus limbatus* Mack., var. *Macklini* Fauv.

Found at Sitkha. Europe (France and the Pyrenees). Fauvel, 30.

224. *P. atomarius* Er., *parvulus* Lec.

Ottawa, Canada; *Harrington*, in litt. Detroit, Mich. (*Schwarz*); Massachusetts, *Blanchard*; Lake Superior, Michipicoton River, Bachewauung Bay (*LeConte*, *Schwarz*). Europe. Sweden. Fauvel, 32. Length .05 inch.

225. *Megarthus sinuatocollis* Lac., *angulicollis* Maek.

Occurs in Sitkha. Mr. Schwarz took it at Grafton, West Virginia and Veta Pass, Col., at 9200–11,000 feet altitude. Europe. Boreal and central Siberia. Fauvel, 28; Heyden, 84.

226. *Micropeplus tesserula* Curt., *costatus* Lec., *costipennis* Maek., *baicalicus* Mots.

Alaska, California, Lake Superior, Michigan, Canada. Europe. Algeria. Syria. Lake Baical, east Siberia; Lebedevo, Arctic Siberia. Fauvel, 7; Heyden, 91.

## TRICHOPTERYGIDÆ.

The following distribution of these minute Coleoptera is translated from that wonderful monument to unwearied patience and unexampled skill—Rev. A. Matthews, Monograph of the Trichopterygidæ—and his subsequent synopsis, published in T. xi, 113, et seq., to which is added all that has been observed in American literature.

227. *Ptenidium evanescens* Marsh, *terminale* Hald.

“Habitat: Europe. America. The Canary Islands and Madeira.” Pennsylvania *Hald.*, Fort Garland, Col. and Detroit, Mich., *Schwarz*. Ottawa, Canada, *Harrington*. Mon., 80; T. ii, 150; J. Ac. i, 109. “A common and abundant species.”

228. *P. atomaroides* Mots.

“Habitat: The Atlantides, North America and Europe, teste Motschulsky; not rare.” Mon. 81. This species for some reason has been omitted in the Synopsis. Mr. Schwarz found it common in a salt marsh on the eastern coast of Florida.

229. *Trichopteryx ambigua* *Matth.*

"Habitat: Rare in Europe, taken twice in England by Mr. Matthews. New York, taken frequently by Dr. Schaum." Mon., 119; T. xi, 139.

230. *T. sericans* *Heer.*

"Habitat: Europe. North America (the United States), the Canaries; found usually in refuse and the rejectamenta of stables." Mon. 130; T. xi, 137. The Kirghis Steppes. Heyden, 87.

231. *T. fascicularis* *Herbst.*

"Habitat: Europe and North America (United States), in ant nests and the rejectamenta of stables, but rarely, or never, in decaying vegetation." Mon. 134; T. xi, 135.

232. *T. atomaria* *De G.*

"Habitat: Europe quite commonly." Mon. 142. The United States, T. xi, 131. Asia (Dauria), Heyden, 88.

233. *Smicrus flicornis* *Fairm.*

"Habitat: rare in Europe; quite common in North and South America in dung, and under rubbish on the river shores." Mon. 112; T. xi, 140. Detroit, Mich., *Schwarz.*

## PHALACRIDÆ.

234. *Olibrus bicolor* *Gyll.*

Occurs in the "Middle States, not common, perhaps imported." P. viii, 16. New York, *Reinecke*; Cedar Keys, Tampa and Enterprise, Florida, *Schwarz.* Europe. Barnaul, west Siberia; Angora River, east Siberia; Turkestan. Heyden, 91.

## COCCINELLIDÆ.

235. *Anisosticta sigata* *Thunb.*, *bitriangularis* *Say*, *multiguttata* *Rand.*

This species is widely distributed. Massachusetts, Canada, Michigan, Illinois, Wisconsin, Hudson Bay, Vancouver Island. France Hungary. Lapland. Irkutsk. T. iv, 369; Crotch, 93.

236. *Adonia constellata* *Laich.*, *mutabilis* *Scriba.*

Nova Scotia *LeConte.* Common throughout Siberia. Col. Am., 245. Europe. North Africa. Madeira. Abyssinia. Central Asia. India. T. iv, 368, Crotch, 98. But one specimen has been found in our territory and this doubtful.

237. *Hippodamia parenthesis* Say.

This species, which occurs nearly everywhere in the United States and Canada to Alaska from Crotch's statement, is perhaps a variety of *H. amoena* Feld., the only difference being in the diminished amount of black in the design of the elytra. *H. amoena* inhabits eastern Siberia. T. iv, 368; Crotch, 97; Heyden, 215; Col. Am. 245.

238. *H. 13-punctata* Linn.

This species also occurs here with the preceding, and is equally widely distributed, extending from Hudson Bay to Alaska, and southward to the West Indies and Mexico. It appears on nearly every faunal list. It is spread throughout Europe. In Siberia it is found on the northern tributaries of the Amur and along the Jenisei and Lena. T. iv, 368; Crotch, 94; Col. Am. 244; Heyden, 215.

239. *Coccinella 3-fasciata* Linn., var. *juliana* Muls., *barda* Lec., var. *Eugenii* Muls., var. *subversa* Lec.

This species is very variable in color ornamentation, and is widely distributed. New York, Canada, Michigan, Lake Superior, Hudson Bay, New Mexico, Colorado, California, Oregon, Alaska. Lapland to Siberia, reaching Kamtschatka. T. iv, 370; Crotch, 115; Col. Am. 245; Heyden, 217.

240. *C. transversoguttata* Fald., 5-notata Kirby, var. *californica* Mem., var. *transversalis* || Muls. (*nugatoria* Muls.)

This is likewise a variable and widely distributed species. Greenland, Hudson Bay, Canada. Green Mountains, Vt.; Mount Washington, N. H.; Michigan, Lake Superior, Kansas, Colorado, Utah, New Mexico, California to Alaska. Lapland. Eastern Siberia (Angara River, Ourga, Amurland); Dauria. T. iv, 370; Crotch, 116; Col. Am. 245; Heyden, 217. Can. Ent. viii, 192.

241. *C. monticola* Muls., *lacustris* Lec., ? *nivicola* Men.

This species occurs in Canada, Michigan, Lake Superior, Kansas, New Mexico, the mountains to Colorado, Oregon, Vancouver Island. *Nivicola*, thought by Crotch to be identical, occurs in Kamtschatka, Lake Baical, Amurland, Iakutsk on the Lena, and in Arctic Siberia. T. iv, 371; Crotch, 115; Col. Am. 245; Heyden, 216.

242. *C. tricuspis* Kirby, var. *Mannerheimi* Muls.

"Hudson Bay, Canada, Lake Superior, Kansas, Siberia (Crotch, 115)." Iakutsk, on the Lena, Irkutsk, Baical, Amurland. T. iv, 371; Heyden, 216.

Obs.—The name *tricusps* used by Thunberg in his enumeration of the Coccinellidæ of Sweden, being unaccompanied by an adequate description, the name Kirbyi proposed as a substitute is unnecessary. Ins. Suecia, P. viii, 1794.

243. *C. menetriesi* Muls.

A variety of *11-punctata* Linn., a species that is spread over Europe, North Africa, Syria and Siberia, is said to occur in northern California by Mulsant; Mr. Crotch thinks this extremely doubtful. T. iv, 364; Crotch, 114; Col. Am. 245; Heyden, 216.

244. *Adalia frigida* Schon., *hyperborea* Payk., *melanopleura* Lec., *ophthalmica* Muls., *barda* Lec.

This species is very variable. It extends across the northern part of the continent from Hudson Bay to Vancouver Island south to California and New Mexico through the Rocky Mountains; Kansas, Missouri, New York, Canada. Lapland. Siberia. Dauria. T. iv, 372; Crotch, 100; Heyden, 216; Nord., 30; Heyden, 1885.

245. *A. bipunctata* Linn., var. *humeralis* || Say, *bioculata* Say, var. *6 pustulata* Linn.

This species is widely distributed, occurring in nearly all the States from the Atlantic to the Pacific, Vancouver Island, Canada and Nova Scotia. It is found throughout the greater part of Europe and Siberia. T. iv, 372; Crotch, 102; Col. Am. 245; Heyden, 216; Nord., 30.

246. *Harmonia (Calvia) 14-guttata* Linn., *similis* Rand., *cardisce* Rand., var. *hesperica* Cr.

*Similis* occurs on Mount Washington, N. H.; *hesperica* in Arizona. "New England States, Crotch; Marquette, Mich., Schwarz. Europe generally. West and east Siberia. Var. *similis* is found in Siberia, 'where forms occur in which black replaces the normal red color.'" T. iv, 373; Nord., 30; Heyden, 217.

247. *H. 12-maculata* Gehl., *incarnata* Kirby.

Hudson Bay. Marquette, Mich.; Lake Superior; Mount Washington, N. H. Kamtschatka. Lake Baical. Dauria. T. iv, 374; Crotch, 110; Heyden, 216.

## ENDOMYCHIDÆ.

248. *Mycetæa hirta* Marsh.

This European species has occurred at various places; Baltimore and New York, Crotch; Detroit, Mich., Schwarz; Buffalo, N. Y., Reinecke; my native specimens are from Massachusetts, Blanchard. T. iv, 362.

## COLYDIIDÆ.

249. *Aglenus brunneus* Gyll., *Anommatus obsoletus* Spence.

This species is figured Brit. Coleop. Delin. by Spry & Shuck, pl. 33, fig. 2. It is probably introduced. My native specimens are from Missouri (*Schuster*); it has also occurred in California (C. 127). Lieut. Casey took a colony of about forty individuals near San Francisco, Cala., under a board long imbedded in a thick grassy turf, Pr. Ent. Soc. Wash. i, 46. In Europe it occurs about houses. Samarkand in Turkestan. Heyden, 94.

250. *Murmidius ovalis* Beck.

Probably introduced from Europe. This minute insect, only .05 inch. long, has been observed several times in this country; it seems to live in mouldy straw. Pr. 1876, 270. My native specimens are from Washington, D. C.

## RHYSODIDÆ.

251. *Rhysodes exaratus* Serv., *americanus* Lap., *aratus* Newm.

This species extends from New York and Michigan southward to Georgia and westward to Missouri and Iowa, though it is not common. I have met it here only once. France. Germany. Austria. Russia. T. v, 162.

## CUCUJIDÆ.

252. *Silvanus surinamensis* Linn., var. *bicornis* Er., *6-dentatus* Fab.

253. *S. bidentatus* Fab.

254. *S. cassiæ* Reiche, *quadricollis* || Lec.

255. *S. advena* Watl., *musaeorum* Zieg.

256. *Nansibius dentatus* Marsh., *major* Zimm.

These five species are cosmopolitan. *S. cassiæ* occurs from New York to the Southern States, where it is especially abundant. *S. bidentatus*, *advena* and *N. dentatus* are generally distributed, being often taken under bark as well as in articles of commerce. Lieut. Casey has outlined these species, T. xi, plate 4; P. vii, 77. *Surinamensis* occurs in Turkestan and western Siberia; *bidentatus* in east Siberia. Heyden, 95.

257. *Prostomis mandibularis* Fab., *americanus* Crotch.

Taken by Mr. Crotch on Vancouver Island; "Oregon, California, Nevada," Casey. Europe. T. v, 74; T. xi, 76.

258. *Pediacus fuscus* Er., *planus* Lec., *subcarinatus* Mann.

This species occurs in Canada, Michigan, Lake Superior, Hudson Bay (*LeConte Cat.*), Nebraska, Colorado, New Mexico, Alaska. Central Europe; Italy. P. vii, 73; T. xi, 79. Amurland (Chabarofka). Heyden, 1886.

259. *P. depressus* Hbst., var. *subglaber* Lec.

North Carolina *LeConte*; Michigan, Lake Superior, Veta Pass, Col., at 9200 feet, *Schwarz*; I took three specimens here under the bark of a standing tree, and have one from Rev. G. W. Taylor from Vancouver Island, all agreeing with the description of *subglaber*. P. vii, 73; T. xi, 79. Central and northern Europe.

260. *Læmophlæus testaceus* Fab., *Zimmermanni* Lec., *bullatus* Lec.

This species is very common here, being mostly found under the epiderm of bark, and occurs in nearly every place where there are deciduous trees from the Atlantic to the Pacific. It is likewise general in Europe. P. vii, 75. Amurland (Chabarofka). Heyden, 1886.

261. *L. alternans* Er.

South Carolina (*Zimm.*). T. ii, 257. Europe.

262. *L. ferrugineus* Steph., *testaceus* Payk.

This and the preceding are said to be cosmopolitan. No record of their having been taken in America has been observed, except that the latter occurred in beans from Brazil, living on the débris of a *Bruchus*, in the Centennial Building, Philadelphia, and in mouldy straw goods from Italy, in New York. Pr. 1876, 270; T. xi, 92.

263. *L. pusillus* Sch., *puberulus* Lec., *longicornis* Mann.

This species likewise accompanies commerce, but there are few records of its occurrence in North America. Dr. LeConte described it from the Colorado River and Mannerheim from Sitkha. My specimens are from Massachusetts (*Blanchard*). P. vii, 75; T. xi, 94. South Carolina, *Zimm.* T. ii, 257.

264. *Dendrophagus glaber* Lec., *cygnæi* Mann., var. *americanus* Mann., var. *germari* Mann.

This form, Mr. Casey states, is probably a variety of *crenatus* Payk., a species of central and northern Europe. T. xi, 98. It is not seemingly abundant, but is distributed from New York and Canada northward and westward to Vancouver Island and Sitkha, and through the Rocky Mountains to New Mexico, whence I have specimens.



265. *Psammœcus Desjardinsii* Guer., *Pseudophanus signatus* Lec., *Cryptamorpha musæ* Woll., *Hubbardii* Casey.

This species is said to be cosmopolitan, accompanying commerce (Mauritius, Madagascar, St. Helena, Madeira). In the United States it is described from Puget's Sound, Washington, by LeConte. P. vii, 85; and was taken abundantly at Crescent City, Fla., by Mr. Hubbard. Casey, Cont. 167; C. 135; Mann. 1853.

### CRYPTOPHAGIDÆ.

266. *Henoticus serratus* Gyll., *denticulata* Lec.

This species occurs from Canada to Alaska. It is not uncommon here in Pennsylvania; Massachusetts and New Hampshire, *Blanchard*; Canada, Michigan, around Lake Superior, Veta Pass, Col., at 10,000 feet, *Schwarz*. L. S. 223. Europe. Amurland (Chabarofka). Heyden, 1886; Mann., 1853.

267. *Cryptophagus cellaris* Scop.

This species has been imported from Europe, where it is found in houses, etc. In this country there are few records of its recognition. Buffalo, N. Y., *Reinecke*; Detroit, Mich., *Schwarz*; San Diego, Calif., *LeConte*. Taschkend in Turkestan. Heyden, 96.

268. *C. saginatus* Sturm.

Also imported from Europe, and identified by Zimmermann in S. Carolina *Horn*. Jeniseisk on the Jenisei, lat. 58° 20'. Nord., 26.

269. *Cænoscelis ferruginea* Sahlb., *testacea* Zimm.

This is likewise a common European species, which was taken in South Carolina by Zimmermann, and also occurred in Alaska. T. ii, 258. Chabarofka. Heyden, 1885; Mann., 1853.

270. *Atomaria Kamtschatica* Mots.

Occurred in Alaska. Kamtschatka. Heyden, 96; Mann., 1853.

The Cryptophagidæ have not yet received any attention in this country from systematists. The species are greatly neglected by collectors on that account, and are mostly undescribed.

### MYCETOPHAGIDÆ.

271. *Typhæa fumata* Linn., *Cryptophagus gilvellus* Muls., *crenatus* || Mels. (P. ii, 114; P. viii, 15)

Cosmopolite through commerce. Occurs wherever flour, grain, etc., are stored.

272. *Hypocopus formicetorum* Mots.

Taken at Garland, Colorado, in ant's nest (*Schwarz*), and thought by the authors of the Classification to be identical with Motschulsky's species, which occurs in the Kirghis Steppes. C., 140; Heyden, 95.

## DERMESTIDÆ.

273. *Dermestes carnivorus* Fab., *mucoreus* Lec.

This species, native in the basin of the Mediterranean, occurs in Texas. P. Am. P. xx, 352.

274. *D. lardarius* Linn., var. *signatus* Lec., var. *vorax* Mots.

This species varies locally in the color and extent of the pubescence. It is nearly cosmopolitan; it is probably native, as well as introduced by commerce. It occurs everywhere from the Atlantic to the Pacific. Eastern and western Siberia, in the basin of Lake Baical; Amurland; Dauria. Var. *vorax* has the basal fascia of the elytra bright, to yellow rufous. T. v, 50; P. vii, 109; P. Am. P. xx, 353; Col. Am. 123 and plate; Heyden, 98.

275. *D. elongatus* Lec.

Should comparison prove this to be the European *bicolor* Fab. as Mr. Jayne thinks probable (P. Am. P. l. c.), its introduction from Europe is quite likely. Though not commonly met with, its distribution is extensive; New York, Canada, Kansas, Texas, Georgia, Florida, whence I have a specimen. P. vii, 109.

276. *D. cadaverinus* Fab., var. *domesticus* Germ., var. *subsulcatus* Ball.

Mr. Schwarz took this European species in southern Florida, and I have a specimen from St. Augustine, Fla. Its occurrence in Alaska is probable, as it occurs in Turkestan; Dauria; Amurland; west and east Siberia to Kamtschatka. Col. Am. 124; Heyden, 98.

277. *D. vulpinus* Fab., *lupinus* Mann., *maculatus* DeG.

This species admits of some variety, chiefly in pubescence; it appears to be cosmopolitan. In this country it is generally distributed from Florida to Alaska; likewise in Europe. It occurs in Arctic, east and west Siberia, and countries to the south. P. vii, 109. Heyden, 98.

278. *D. Frischii* Kug.

This species has likewise been introduced from Europe. It occurs abundantly on Brigantine Beach, N. J., and has been taken by Mr. Ulke at Washington, D. C. (*Ulke, in litt.*). Can. Ent. xvi, 37. Amurland and adjoining countries in the orient. Heyden, 98.

Obs.—*D. murinus* *Lin.* frequently appears in our literature, perhaps from a wrong determination of certain forms of *caninus* Germ. with brown antennæ and a minimum of fulvous mottling.

279. *Attagenus piceus* *Oliv.*, *megatoma*, *Fab. dichrous*, *rufipennis*, *spureus*, *Lec.*

The synonymy indicates local variability. It is found abundantly in houses and granaries, also frequenting flowers. It occurs nearly everywhere from the Atlantic to the Pacific, and also is general in Europe, whence it has undoubtedly been imported. P. vii, 109; P. Am. P. xx, 355; Lintner's second Annual Report, New York, p. 46, gives its economic history.

280. *A. pellio* *Linn.*, *bipunctatus* *DeG.*

This species, introduced from Europe, is much rarer, living mostly on desicated animal substances; it is occasional in museums. It has occurred in Nova Scotia, Canada, Michigan, New York and various places in the eastern States. P. vii, 109; P. Am. P. xx, 356.

281. *Anthrenus scrophulariæ* *Linn.*, var. *thoracicus* *Mels.*, var. *flavipes*, var. *lepidus* *Lec*

The varieties denote color ornamentation rather than differences of structure. The larvæ of this beetle are sometimes very destructive to carpets, and occasionally infest museums of natural history. It occurs in many places from the Atlantic to the Pacific, but not everywhere. Europe. P. vii, 112; P. Am. P. xx, 369; Amer. Nat. xii, 536.

282. *A. varius* *Fab.*, *verbasci* *Linn.*, *tricolor* *Herbst*, var. *destructor* *Mels.*

This insect is in bad repute with all who make zoological collections. It appears to be cosmopolite. P. vii, 112; P. Am. P. xx, 370; Can. Ent. xv, 82 and 90. Heyden, 99.

283. *A. museorum* *Linn.*, *castaneæ* *Mels.*, *verbasci* *Fab.*

This species is very abundant from early spring to June on various flowers, especially *spiraea*, *cornus* and *castanea*. It is not known here to have any bad habits like the foreign species. It occurs in Canada, and in nearly all the States eastward from the Mississippi. Europe. The southern parts of east and west Siberia. P. vii, 112; P. Am. P. xx, 370; Can. Ent. xv, 90. Heyden, 99.

284. *A. claviger* *Er.*, *fuscus* *Latr.*

This European species occurs in Pennsylvania, though I have not met with it. T. v, 252; P. Am. P. xx, 371.

285. *Orphilus glabratus* Fab., *ater* Erich, *subnitidus* Lec.

This species occurs in spring on various flowers, and extends from ocean to ocean. Europe. Taschkend in Turkestan. P. vii, 113; P. Am. P. 373. Heyden, 99.

## HISTERIDÆ.

286. *Hister merdarius* Hoffm., *memnonius* Say.

This species, which inhabits central and southern Europe, and likewise eastern Siberia, occurs in various places in the Middle and Southern States, but not abundantly. Southwest Virginia, New York, Ottawa, Canada; *Harrington, in litt.*; Michigan, Escanaba and Marquette, Mich., *Schwarz*. I take it here in Pennsylvania, also in eastern Ohio and West Virginia. P. Am. P. xiii, 284. Heyden, 89.

287. *H. bimaculatus* Linn., *obliquus* Say.

This species is general in Europe, extending to the Kirghis Steppes, Turkestan, and the adjacent parts of Siberia. It occurs here in the Middle States, *Horn*; Detroit, Mich., *Schwarz*. I take a specimen occasionally here in Pennsylvania, and have specimens from Iowa and northern Illinois, loc. cit. 292. Heyden, 89.

288. *Paromalus 14-striatus* Steph., *nana* Lec.

This species is somewhat cosmopolitan. Middle States to Georgia (*Horn*, l. c. 308). I once saw several hundred specimens in a desicated carcass on Brigantine Beach, N. J., and also took a colony here in some half dried fungus, and have specimens from St. Augustine, Fla.

289. *Saprinus rotundatus* Kugel, *deletus* Lec.

"Occurs in the entire Atlantic region and also in California; var. *communis* Mars. is a form found in Canada, and var. *interceptus* Lec. in California and Oregon." (*Horn*, l. c. 314) Europe. The southern parts of east and west Siberia and Turkestan. Heyden, 90.

## NITIDULIDÆ.

290. *Brachypteris urticæ* Fab., *Cercus pusillus* Mels.

This species is found on the flowers of *Urtica dioica*, with which it has probably been introduced from Europe. "Occurs in the Atlantic States," *Horn*, T. vii, 270. New York, Canada, Michigan, Kansas, Colorado; abundant here in Pennsylvania. Krasnojarsk, on the Jenisei, lat. 56°; Nord. 25.

291. *Cercus bipustulatus* Payk.

A few individuals of this European species were once taken near Boston, Mass., *Horn*, but any further record of occurrence has not been observed; var. *suturalis* Mots. is found in eastern Siberia; T. vii, 272; Murr., 233.

292. *Carpophilus hemipterus* Linn., *bimaculatus* Mels., *flexuosus* Payk.

Variable both in ornamentation and thoracic structure, cosmopolitan. Florida, Canada, Alaska, are the extreme points of its occurrence. I take it here mostly in boxes of dried fruit, as raisins, currents, etc., brought from foreign countries. It also occurs in Siberia, l. c. 277; Murr., 362; Heyden, 91.

293. *C. dimidiatus* Fab., *mutilatus* Er., *luridus* Murr.

"Occurs everywhere in our country excepting the Pacific coast. Its original habitat was probably the West Indies, but it is now cosmopolitan," Horn, l. c. 278; Murr., 377-79; some of the points of its occurrence are Florida, here in Pennsylvania, Ohio, Texas, New Mexico, Colorado, Alaska. Mann., 1852.

294. *Epuræa æstiva* Linn., *convexiuscula* Mann.

On this continent this species appears to affect the colder parts. Canada, northern Michigan, New Mexico, Alaska, are all points in its distribution. Mr. F. Blanchard found it in the mountains of North Carolina (*in litt.*) loc. cit. 299. Europe. Western Siberia. Heyden, 92.

295. *E. luteola* Er., *texana* Crotch.

Dr. Horn states that this species is becoming cosmopolitan. "Originally occurring in our Gulf States and Cuba, it has spread to Europe (*Reiche*) and Ceylon (*Murray*)," l. c. 301.

Obs.—Several species of *Epuræa* of the boreal and Arctic regions, when those of both continents shall have been collected by some competent entomologist, will probably be found identical.

296. *Nitidula bipustulata* Linn.

This beetle occurs in many countries, and has been introduced here by commerce. It now extends from Florida to Canada and westward to Colorado, whence I have specimens. West and east Siberia; Amurland, l. c. 302. Heyden, 92; Heyden, 1886.

297. *N. rufipes* Linn., *obscura* Fab., *ossium* Kirby.

This species has likewise been introduced from Europe, and has about the same American distribution, extending northward to Hudson Bay. West and east Siberia, l. c. 303; Heyden, 92; Amur Territories; Heyden, 1885.

298. *Omosita colon* Linn.

This is another introduced European species, and, like the two preceding, occurs here, though greatly more commonly and abundantly. It has spread from the Atlantic to Colorado, where it meets *O. discoidea* in its eastern progress. The southern contiguous parts of west and east Siberia; Amurland, l. c. 306; Heyden, 92.

299. *O. discoidea* Fab., *inversa* Lec.

"Occurs in Europe and in the Pacific States, extending as far east as Colorado," Horn, l. c. 306. Northern Michigan, *Schwarz*; Ottawa, Canada, *Harrington*, *in litt.* It appears to be very abundant in New Mexico and Colorado.

300. *Meligethes brassicæ* Scop., *æneus* Fab., *rufimanus* Lec., *mærens* Lec., *californicus* Reitter.

"This species occurs in California and Oregon," Horn, l. c. 313. The var. *dauricus* Mots. *viridipennis* Mots. occurs throughout eastern Siberia and Amurland; Col. Am. 129 and figure.

301. *Cryptarcha strigata* Fab.

While not very abundant, this species is found in many places from the Atlantic to Colorado, though a record northward from Michigan has not been noted. West Siberia, l. c. 322; Heyden, 93; Chabarofka, Heyden, 1886.

302. *Ips fasciatus* Olin., *geminatus* Mels., *4-signatus* Say, *6-pustulatus* Reit., *bipustulatus* Mels.

These names indicate merely color variations, and several others might be given with equal propriety to other forms. I observe no structural differences of any permanency between these forms, nor the *4-guttatus* Linn. of Europe, which has nearly the same markings as *geminatus*. This species occurs everywhere in the United States eastward from the Rocky Mountains and across the northern part of the continent to Oregon and Vancouver, l. c. 323, Can. Ent. xvii, 46.

## LATRIDIIDÆ.

The species of this family being minute and difficult to recognize, are mostly neglected by collectors, many of them are undescribed, and their distribution is but faintly indicated by the records.

303. *Haloparamecus singularis* Beck.

A little thing, only .03 inch. in length, which inhabits under bark in central Europe; occurred at Fort Yuma, California. C. 156; and at New York in mouldy straw goods from Italy. Pr. 1876.

304. *Latridius minutus* Linn., *reflexus* Lec.

"New York, Lake Superior, Illinois," LeConte, vii, 304. Northern Michigan, *Schwarz*. Alaska, Mann., 1853. Very abundant here, and also in Ohio and West Virginia in early spring, under bark and about wood. It is general in Europe, and common in eastern Siberia to Kamtschatka, also in Turkestan. Col. Am. 114; Heyden, 96.

305. *L. parallelocollis* Mann., *consimilis* Mann.

Alaska, Lake Baical, eastern Siberia. Heyden, 96.

306. *L. filiformis* Gyll.

"A specimen of this European species was found in Missouri and another in the Acad. of Nat. Sci. at Philadelphia," LeConte, P. vii, 304. I once took here some specimens of this minute insect in the débris of a box of imported raisins.

307. *L. ruficollis* Marsh., *pulicarius* Mels.

"Middle and Southern States; sometimes abundant, flying at twilight," LeConte, l. c. 304; P. ii, 115. Europe.

308. *Coninomus carinatus* Gyll., *Latridius sculptilis* Lec.

Southern Illinois, *Haldeman*; LeConte, l. c. 303. Detroit, Mich., *Schwarz*. Europe.

309. *Corticaria pubescens* Gyll., *grossa* Lec., *piligera* Mann.

"One specimen found at the edge of a salt marsh, near Cambridge, Mass., in May," LeConte, l. c. 299; northern Michigan, *Schwarz*. Europe. Barnaul, southeastern west Siberia. Heyden, 97.

310. *C. fenestralis* Linn., *deleta* Mann., *Kirbyi* Lec., *ferruginea* Marsh, *denticulata* || Kirby.

This species occurs at widely separated places (Florida, south and north Michigan, Veta Pass, Col., at 9200 feet) *Schwarz*; Buffalo, N. Y., *Reinecke*; very abundant at Lake Superior, *LeConte*; Hudson Bay region; Alaska. Europe. Kamtschatka; common in Dauria. P. vii, 300; Col. Am. 113; Heyden, 97; Chabarofka, Heyden, 1886.

311. *C. serrata* Payk., *prionoderu* Lec., *8-dentata* Say.

Buffalo, N. Y.; Detroit, Mich.; Nebraska; San Jose, California, are recorded as places where this species has occurred. Europe. P. vii, 300.

312. *C. elongata* Hummel.

Detroit, *Schwarz*; I have a specimen from Massachusetts, *Blanchard*, and have taken it here twice, beaten from herbage. Europe.

## TROGOSITIDÆ.

313. *Tenebrioides mauritanica* Linn., var. *nitida* Horn, var. *crassicornis* Horn.

This is a cosmopolite. It abounds here in mills and granaries, and occurs as far north as Alaska. Europe. Siberia; Turkestan. Pr. 1862, 63; Heyden, 94.

314. *Peltis* (*Ostoma*) *ferruginea* Linn., *fraterna* Rand.

Mr. Randall took this species in Maine under bark. B. J. ii, 17; Green Mountains, Vermont, *Sprague*; Canada; Hudson Bay region; Lake Superior region; Colorado, California and Oregon, *Horn*. I have specimens taken in Pennsylvania. Europe. Irkutsk, east Siberia. Heyden, 94. Chabarofka, Heyden, 1886.

315. *Calitys* (*Nosodes*) *scabra* Thunb., *dentata* Fab., *silphides* Newm., *Peltis serrata* Lec.

This species crosses the northern part of the continent: New York, Canada, Michigan, Lake Superior, Washington Territory. I have a specimen from Colorado. Central and northern Europe. Pr. 1859, 84.

## MONOTOMIDÆ.

316. *Monotoma picipes* Herbst., *foveata* Lec., *scabra* Kunze, var. *brevipenne* Kunze.

"Occurs from the Middle States to Texas and California," Horn, T. vii, 259; P. vii, 305. Massachusetts (*Blanchard*); Ohio, *Dury*; Michigan, *Schwarz*. "Probably introduced from Europe," *Horn*. Siberia and the countries southward. Heyden, 95.

317. *M. 4-foveolata* Aube.

"Occurs in the District of Columbia, *Ulke*," Horn, T. vii, 260. Europe.

318. *M. longicollis* Gyll.

"Three female specimens occurred in the District of Columbia," *Horn*, T. vii, 261. I took a single specimen here in Pennsylvania. Europe.

## DERODONTIDÆ.

319. *Peltastica tuberculata* Mann.

A species of this genus has been described by Mr. George Lewis, from Japan, of which Dr. Horn writes: "Having compared specimens sent me by Mr. Lewis with the series in my cabinet of our species, they seem scarcely more than a variety." Oregon to Alaska.



## BYRRHIDÆ.

320. *Simpliocaria metallica* Sturm., *Byrrhus tessellatus* Lec. (L. S. 224)

Occurs abundantly at Mount Washington, N. H. B. J. xvi, 269. The Lake Superior region; Alaska. Mann., 1853. P. vii, 116. Sweden. Hungary. Germany.

321. *Cytilus sericeus* Forst., *varius* Fab., *trivittatus* Mels.

These names seem to indicate mere differences in the color and arrangement of the pubescence. I have seen many specimens from various places in Europe and America; were the so-called species deprived of pubescence and mixed, I know of no character by which they could be separated. The individuals are abundant when found. As thus constituted the species extends northward from Pennsylvania to Hudson Bay (the Green Mountains, Vermont, Mount Washington, N. H.; Nova Scotia; Canada; Michigan; the Lake Superior region. Eastern and western Siberia. P. vii, 115; Heyden, 100; Heyden, 1886.

322. *Byrrhus murinus* Fab., *undatus* Mels.

This species occurs in New York, Northern Michigan, Lake Superior, Pennsylvania, but apparently is not common. Europe. West and east Siberia. P. ii, 117; P. vii, 115; Heyden, 99.

323. *B. fasciatus* Fab., var. *Kamtschaticus* Mots.

Europe. Kamtschatka, east Siberia, Amurland, Dauria. Col. Am. 123 and figure; Heyden, 100.

324. *Cyphon variabilis* Thunb., *ovalis* Say, *fusciceps* Kirby, *Helodes picea*, *punctata*, *nebulosa*, *modesta* Lec., *pubescens* Fab.

This excessively variable species occurs here in the greatest abundance, and every place that is not too arid; "extending from the Hudson's Bay region to Florida and Texas, and in the west to Vancouver;" abundant in Alaska, Mann., 1853. Europe. On the Jenisei and Obi, Arctic Siberia. Heyden, 125; Nord., 27.

325. *C. Padi* Linn., *Helodes pusilla* Lec.

"Occurs from Massachusetts to Indiana," Horn, l. c. 110; Bache-wauung Bay, Michipicoton River, *Schwarz*; Ottawa, Canada, *Har-rington*, *in litt.* Europe. On the Jenisei and Obi, Arctic Siberia. Nord., 27; Heyden, 125.

326. *C. coarctus* Payk., *griseus* Gebl.

This species is said by Guérin to occur in our fauna, but is unknown, Horn, l. c. 109. Europe. Barnaul, west Siberia. Heyden, 125.

## ELATERIDÆ.

327. *Cryptohypnus hyperboreus* Gyll.

This species, which occurs in the Alps and Lapland in Europe, and on the Obi and Jenisei in Arctic Siberia and in Kamtschatka, is found in Alaska according to Mannerheim. Heyden, 121; Nord., 26.

328. *C. pulchellus* Linn., *exiguus* Rand., *guttatulus* Mels.

Dr. LeConte supposed this species might have been introduced from Europe. Massachusetts, whence my native specimens; New York; the mountains of Lycoming, Pa.; Ohio (*Dury*). T. Am. P. x, 487. West Siberia. Heyden, 121.

329. *C. littoralis* Esch.

Occurs in Alaska. Kamtschatka. Heyden, 121. My specimens are from Sitkha, where it is said to be common.

330. *C. bicolor* Esch., *lacustris* Lec., *picescens* Lec., *fallax*, *limbatus*, *scarificatus* Mann.

Common in Labrador (*Packard*); Mount Washington, N. H., *Austin*; Lake Superior (*LeConte*, *Schwarz*); Veta Pass, Col., at 9200 feet, *Schwarz*; Alma and Leavenworth Valley, Col., at 9000–10,000 feet, *Bowditch*; Santa Fe Cañon, New Mexico, *Snow*; Alaska, *Mann*. Kamtschatka. Heyden, 121. Nikolaevsk, Heyden, 1885.

331. *Elater nigrinus* Payk., *anthracinus* Lec.

The distribution of this species is wide; Alaska to Vancouver, *LeConte*; Michigan, *Schwarz*; Canada; Green Mountains, Vermont, *Sprague*. Central and northern Europe. Barnaul, on the Obi, west Siberia; Amurland. T. xii, 10; Col. Am. 111; Heyden, 120; Mann., 1853.

332. *Melanotus castanipes* Payk., *obscurus* Oliv. (*scrobicollis* Lec. ♂. *castanipes* Lec. ♀, *Horn*, in litt.); *inæqualis* Lec.

This species, as thus constituted, occurs from the Middle States to Canada (Pennsylvania, Ohio, New York, Green Mountains, Vermont, Michigan, Lake Superior region). Europe. West Siberia; Amurland. T. Am. P. x, 476; Heyden, 121.

333. *Athous undulatus* DeGeer, *trifasciatus* Herbst., var. *bifasciatus* Gyll., var. *unifasciatus* Motsch.

“Mr. Ulke received specimens of this species from Hudson Bay, LeConte. Pr. 1866, 391; notice of its occurrence elsewhere has not been observed. Europe. Siberia (Iakutsk, on the Lena, and several places in the Government of Tomsk). Heyden, 122.

334 *Paranomus (Eanus) costalis* Payk., *Limonijs vagus* Lec.

The northern shore of Lake Superior, *LeConte*; Isle Royal, *Schwarz*; Mount Washington, N. H., *Austin*; Labrador, *Packard*. Europe (Sweden. Finland. Lapland). Nikolaevsk, on the Amur. T. Am. P. x, 434; Col. Am. 112; Heyden, 124.

335. *Corymbites virens* Schranke, *anchorago* Rand., *Kendalli* Kirby, *æneicollis* Oliv.

This fine species is found in the northern range of States, and northward through Canada to 65° latitude. Maine (*Randall*); Mt. Washington, N. H., *Austin*; Canada (*various collectors*); Detroit and Marquette, Mich., *Schwarz*; north side of Lake Superior, *LeConte*; I have a specimen from Manitoba. Europe (Germany. Austria. France), l. c. 444; B. J. ii, 5.

336. *C. tessellatus* Linn., *viridis* Say, *cuprascens* Lec., *micans* Germ., *holosericeus* Oliv. (var. *pruinosis* Mots., Japan and the Amur)

New York and the New England States, *LeConte*; Green Mountains, Vermont, *Sprague*; Detroit, Mich., *Schwarz*. Canada. Specimens from the Italian Alps are identical with my specimens from Canada; Arctic, east and west Siberia; Turcomania; l. c. 444-45; Heyden, 123.

337. *C. sericeus* Gebler.

This species inhabits in the peninsula of Kenai (fide Ménétries). Kamtschatka; Amurland; west Siberia. Mann., 1853; Heyden, 123.

338. *C. metallicus* Payk., *nigricornis* Panz., *nitidulus* Lec.

Abundant at Lake Superior, *LeConte*; Detroit and Marquette, Mich., Garland and Veta Pass, Col., at 9400 feet, *Schwarz*; my specimens are from Massachusetts. Central and northern Europe; l. c. 448. Siberia, Heyden, 123.

339. *C. cruciatus* Linn., *pulcher* Lec., *festivus* Lec.

This beautiful species, though not common, is widely distributed. Green Mountains, Vermont, *Sprague*; New Hampshire, *LeConte*; Ottawa, Canada, on beech logs, *Harrington*; Steilacoom, Washington, *LeConte*; my specimen is from Vancouver Island. Europe; l. c. 440; T. iii, 323; P. R. R. 46; Can. Ent. xvi, 71.

340. *C. confluent* Gebler, a variety of *rugosus* Germ.

Occurs in Alaska. Russia. Siberia (places in the governments of Tomsk and Yakutsk). Mann., 1853; Col. Am. 109; Heyden, 124.

341. *C. (Elater) semivittatus* Say, *tristis*, Cand.

Specimens of *tristis*, taken in Japan, on comparison, do not differ from *semivittatus*, which is believed by Dr. Horn to be the older name. Horn, x, 228; T. vii, p. xvi.

## BUPRESTIDÆ.

342. *Chalcophora virginiensis* Drury, *C. angulicollis* Lec., *C. mariana* Linn.

These names in the catalogues are specific. Numerous specimens of *virginensis* from the eastern Atlantic States to Florida; of *angulicollis*, from the Rocky Mountains and Vancouver, and of *mariana* from Europe, have been seen and compared, with the result that there has been no character observed permanent enough to more than separate them into geographical races. The external sexual characters are apparently the same. There are as valid reasons for making species of at least two other forms which I have seen as of the above.

*C. virginensis* Drury. *virginica* Say, *liberta* (var. *obscura*), Fitch, *novæboracensis* Fitch.

Middle, Eastern and Southern States, *LeConte*; var. *lacustris* Lec. (*Crotch*). Lake Superior.

*C. angulicollis* Lec., *oregonensis* Fitch.

Vancouver to New Mexico and California.

*C. mariana* Linn., *hiulca* Pallas.

Europe. West Siberia (the Obi and tributaries). T. Am. P. xi, 190; Pr. 1873, 84; Heyden, 115.

343. *Mela ophila longipes* Say, *immaculata* Mann.

This species is often mentioned in our literature as, and has been labeled in many of our collections, *appendiculata* Fab., which, on comparison with several specimens in hand it may prove to be (Horn, T. x, 104). It is very widely distributed. "Maine to Alaska," Horn. Hudson Bay; Vancouver; Rocky Mountains to New Mexico; Lake Superior. I take it here in Pennsylvania, and have it from West Virginia and Ohio. General in Europe. Arctic Siberia; Kamtschatka; Siberia generally. T. Am. P. xi, 211; Col. Am. 108; Heyden, 117.

344. *M. Drummondii* Kirby.

Dr. Horn regards this excessively variable species as merely a slight variety of *guttulata* Gebl. (T. x, 104), which seems also to

have been the opinion of Mannerheim, whose synonymy is *guttulata* Gebler, *discopunctata* Fald., *Drummondi* Kirby, *Gebleri* Dej. (Mann., 1853) It has the same distribution as *longipes*, except that notice of its occurrence in the Atlantic States southward from New York has not been observed. Arctic, western and eastern Siberia, and along the Amur. T. Am. P. xi, 213; Col. Am. 108; Heyden, 117; Heyden, 1885.

345. *Anthaxia salicis* Fab.

This brilliant little European species was taken by H. A. Brous, at Smoky Hill, Kansas, in a Malvaceous plant, as recorded by Dr. Horn, T. x, 107. Its further occurrence has not been noted.

### LAMPYRIDÆ.

This family is not in great favor with collectors and systematic writers, and while the more common and conspicuous species are superficially known, a commencement of the study is about all that can be claimed. Only two species, one of them introduced, have so far been identified with European or Asiatic species; others may in time.

346. *Eros aurora* Hbst., *coccinatus* Say.

This species is not uncommon here in Pennsylvania; it extends from Georgia to the Mississippi, and northward to Canada, Lake Superior and Oregon. Europe generally. Eastern and western Siberia. T. ix, 24; Heyden, 126.

347. *Lamprohiza* (*Phausis*) *splendidula* Linn.

"Introduced from Europe and apparently naturalized in Maryland and Illinois," LeConte, T. ix, 36.

### MALACHIDÆ.

348. *Malachius æneus* Linn.

This European species occurred at Cambridge, Mass., but does not seem to have spread widely. P. vi, 165; T. iv, 113. Eastern and western Siberia. Heyden, 128.

### CLERIDÆ.

349. *Opilus domesticus* Sturm.

This species of northern and central Europe has been introduced into Canada, LeConte's List, 55. It occurred but once, and has not been found since, *Horn*.

350. *Tarsostenus univittatus* Rossi, *albofasciatus* Mels., *Tillus picipennis* White.

This is a cosmopolitan species which has occurred at a few places in North America. Pennsylvania, *Melsheimer*; Texas, *Le Conte*. Pr. 1873, 334; An. Lyc. v, 17; J. A. iv, 36.

351. *Laricobius Erichsoni* Ros., *rubidus* Lec. (C. 220)

District of Columbia under the bark of a conifer, *Le Conte*; Detroit and Marquette, Mich., *Schwarz*; Ottawa, *Harrington*; my specimens are from Massachusetts, *Blanchard*. Europe (the Alps).

352. *Necrobia rufipes* DeG.

This species and the two following are well known cosmopolites. *Rufipes* is found from Florida to Vancouver, and throughout Europe and Siberia. It is the notorious ham beetle, the pest of pork packing establishments, and the occasion of an interesting law suit. Riley, Missouri Rep. vi, 96; Heyden, 130.

353. *N. ruficollis* Fab.

This species is as widely distributed as *rufipes*, extending to Alaska. It does not seem to have occurred in Siberia. It lives mostly on carcasses. This beetle has attained celebrity as instrumental in saving the illustrious Latreille from transportation and consequent death.

354. *N. violaceus* Linn.

This species occurs nearly everywhere in North America, and is probably native as well as introduced, since it is spread over eastern and western Siberia Europe generally. An. Lyc. iv, 162; Col. Am. 113; Heyden, 130.

## PTINIDÆ.

The species of this family here catalogued have been introduced from Europe, with perhaps one exception, being transported from place to place in articles of commerce.

355. *Gibbium scotias* Scop.

My specimens of this curious species are from New Orleans, Louisiana; Charleston, S. C., *Horn*. Central and southern Europe in old buildings.

356. *Trigonogenius gibboides* Boisl.

Found depredating on plants in the Calif. Acad. Sciences, *Harford in litt*. Europe. Sicily. Corsica. Algeria.

357. *Ptinus fur* Linn., *humeralis* Say.

This species inhabits old houses, natural history museums, etc., and occurs occasionally in all parts of our country to Alaska. It is common in Europe and Asia to Kamtschatka. Col. Am. 154; Heyden, 130.

358. *P. brunneus* Duft., *frontalis* Mels.

Occurs in the District of Columbia, where it is commonly bred from rats' dung by Mr. Pergande (Proc. Ent. Soc. Wash. i, 14). I take it here in Pennsylvania; Ohio, *Dury*; Missouri, *Schuster*; Texas, *Belfrage*. France. Germany. Southern Europe.

359. *Ernobius mollis* Linn., *convexifrons* Mels.

"A common European species introduced into the Atlantic States," *LeConte* (Pr. 1865, 224; Pr. 1861, 352). Melsheimer took it in southeastern Pennsylvania, and it occurs here; northern and southern Michigan, *Schwarz*. Europe. Barnaul on the Obi, west Siberia, Heyden, 131.

360. *Xestobium tessellatum* Fab.

"Introduced into the Atlantic States from Europe," *LeConte* (l. c. 227). I have seen no native specimens, nor record of occurrence. The specimens in Blanchard's and Horn's collections are from Massachusetts.

361. *Sitodrepa panicea* Linn., *tenuistriatum* Say, *obesum* Mels.

This is a cosmopolitan species common throughout North America to Alaska and Europe, and all Siberia to Kamtschatka. It is often a great pest in houses, stores and museums, l. c. 229; Can. Ent. xv, 92; Col. Am. 154; Heyden, 131.

362. *Nicobium hirtum* Ill.

Dr. LeConte had in his collection a specimen probably taken in Georgia, and Schwarz took one in Florida. I have observed no other record of its occurrence in this country. Europe (France. Spain. Italy). *LeConte*, l. c. 231.

363. *Lasioderma serricorne* Fab.

This species, according to Dr. LeConte, lives chiefly, though not exclusively, on tobacco (l. c. 238), and has been carried by commerce over the whole globe. Mr. Schwarz took it at Detroit, Mich. I have it from Louisiana, and have taken it here in Pennsylvania. It is probably common enough, but not generally recognized.

364. *Endecatomus reticulatus* *Hbst.*

Probably introduced from Europe into the Southern States, *Horn* (P. Am. P. xvii, 540. Central and southern Europe. Eastern Siberia. Heyden, 131; Heyden, 1886.

365. *Dinoderus substriatus* *Payk.*

This species appears to be native, and occurs particularly in the northern States and Canada, *Horn* (l. c. 549). Northern Michigan and Veta Pass, Col., at 9400 feet, *Schwarz*; Canada (*various collectors*), abundant in Alaska. Europe. The governments of Tomsk and Irkutsk, west and east Siberia. Heyden, 131; Mann., 1853.

366. *D. (Rhizopertha) pusillus* *Fab.*

Dr. Horn states: "This insect appears to be cosmopolite, having probably been distributed in articles of commerce. Numerous specimens were observed in the wheat at the Centennial Exposition. It probably occurs over our entire country, as I have specimens from Arizona," l. c. 550.

## SCARABÆIDÆ.

367. *Onthophagus nuchicornis* *Linn., rhinoceros* *Mels.*

Melsheimer took this European species in Pennsylvania, and it is known to occur in New Brunswick, Rhode Island and the Magdalen Islands in the Gulf of St. Lawrence (*Henshaw*, Can. Ent. xix, 160). It also occurs in western and southeastern Siberia. Heyden, 103.

Obs.—*O. ovatus* *Linn.* The species in our literature so named is pennsylvanicus *Harold*.

368. *Aphodius fossor* *Linn.*

"Introduced from Europe into the New England States and Canada (*Horn*);" Mount Washington, N. H.; the Green Mountains, Vermont; Ottawa, Canada; Detroit, Mich. My specimens are from Trenton, Canada; eastern Siberia and Turkestan. Heyden, 104; see for this and all the following species *Horn's Monograph*, T. xiv, adde 4, *et seq.*

369. *A. erraticus* *Linn., pensvallisensis* *Mels.*

This common European species "has been introduced, doubtless through commerce, into the Middle States (*Horn*), and is abundant in Druid Hill Park in Baltimore, and in the surrounding counties in Maryland (*Lugger*, P. W. i, 49). It occurs in eastern and western Siberia. Heyden, 103.



370. *A. fimetarius* Linn., *nodifrons* Rand.

Also a common introduced European species found abundantly nearly every place east of the Rocky Mountains. "It will probably invade every portion of our territory (*Horn*)."

In Asia it inhabits Turkestan, and eastern and western Siberia. Nord., 26; Heyden, 104.

371. *A. aleutus* Esch., var. *ursinus* Mots. (*Horn*, T. xiv, 13)

"*Aleutus* occurs from the high regions of Colorado westward to California, Oregon, Washington and northward to Alaska (Leavenworth Valley and Alma at 10,000–11,000 feet, *Bowditch*; New Mexico, *Snow*)."

Var. *ursinus* inhabits Kamtschatka and other places in eastern Siberia. Heyden, 105; Mann., 1853.

372. *A. foetidus* Fab., *putridus* Herbst, *tenellus* Say.

"Probably introduced from Europe, and occurs from the Atlantic coast to Colorado and New Mexico," *Horn*. It is much less common and abundant than *fimetarius* or *inquinatus*. It is an inhabitant of western Siberia. Heyden, 104; Nord., 26.

373. *A. granarius* Linn., *aterrimus* Mels., *metallicus*, *spretus* Hald.

"Originally an inhabitant of Europe; this species has been spread by commerce throughout the world," *Horn*. It seems to inhabit the United States and Canada generally, though its northern extension is uncertain, but probably to a high latitude, since it occurs in eastern and western Siberia, Heyden, 104. In this instance, as in some others, we may possibly have the species as a native as well as by introduction.

374. *A. lividus* Oliv.

"This species is widely distributed in the eastern hemisphere, and has been introduced in the West Indies, whence it has probably spread to our Southern States, extending west to New Mexico," *Horn*. I take it here though not abundantly. Siberia (*Nikolaevsk*), Heyden, 1885.

375. *A. inquinatus* Fab., *maculipennis* Mels.

This species, introduced from Europe, is excessively abundant nearly everywhere east from the Rocky Mountains, and is likewise an inhabitant of eastern and western Siberia. Heyden, 105.

376. *A. rufipes* Linn.

This fine species occurs in the mountains of Pennsylvania, Maryland and North Carolina. Probably indigenous and not introduced, *Horn*, T. xiv, 53; Can. Ent. xx, 9 and 66. Inhabits Siberia (place not mentioned) and Europe generally. Heyden, 106.

377. *A. depressus* *Kug.*

One specimen was found in New York by Mr. A. Merkel, "and it is barely possible this may be an accidental introduction (*Horn*, l. c.)." It inhabits Europe generally, and is found in eastern and Arctic Siberia. Heyden, 106; Nord., 26.

378. *A. prodromus* *Brahm.*

"Occurs very commonly in Europe, and in our country has been collected by Prof. Fernald, Maine, and a specimen has been obtained from Montreal, Canada (*Horn*, l. c. 60)." It also occurs in western Siberia at Barnaul, on the Obi. Heyden, 105.

379. *Oxyomus porcatus* *Fab.*, *opacifrons* *Horn.*

"Has evidently been introduced from Europe, where it is common, and in our country has been found near New York and Philadelphia (*Horn*, l. c. 65)." T. iii, 284.

380. *Pleurophorus cæsus* *Panz.*

This small species has probably been introduced from Europe into the Middle States, and has been taken abundantly near Baltimore by Mr. Lugger, and near Washington by Mr. Ulke (*Horn*, l. c. 91). T. iii, 291. In Asia it occurs in Turkestan. Heyden, 106.

381. *Hybosorus Illigeri* *Reiche*, *arator* *Ill.*, *carolinus* *Lec.*

This species, common in southern Europe, has occurred in the Southern States, but is not common in collections. It also occurs in Asia in Turkestan (*Sols.* 76, 351). Heyden, 107. See a description by Dr. LeConte *J. Acad.* i, 84.

382. *Trox scaber* *Linn.*

This species is spread generally from the Atlantic to the Rocky Mountains. It occurs in western Siberia and Turkestan "and in every quarter of the globe," *Horn*, T. v, 11; Heyden, 108.

383. *Tropinota hirta*, *Poda hirtella* *Linn.*, *Cetonia vestita* *Say.*

This species was described by Say from a specimen in the Philadelphia Museum, and another sent him by Dr. Wm. T. Harris, of Milton, Mass. Mr. E. P. Austin took a small number, in 1879, in Massachusetts, T. viii, p. xix. Its distribution in Europe is general, and it is found in western Siberia and Turkestan. Heyden, 113.

## CERAMBYCIDÆ.

384. *Tragosoma Harrisii* *Lec.*

The authors of the Classification of the Coleop. of N. A. say (p. 274) that this scarcely differs from the north European T. dep-

sarium *Linn.*, and that it "occurs from New Foundland to Vancouver, but is not abundant (Coney Island, Bul. Brook. vii, 60; Mount Washington; Green Mountains; Ottawa, Canada; Buffalo, N. Y.; Detroit, Mich.; Lake Superior. My specimens are from New Mexico, Colorado and Utah)." *T. depsarium* inhabits Alpine and northern Europe, western and eastern Siberia. Heyden, 183; Col. Am. 153.

385. *Hylotrupes bajalus* *Linn.*, *bullatus* Hald.

Harris (Insects Injurious to Vegetation 88) supposes this species to have been introduced in its larva state in timber from Europe into the Eastern States, where it occurs near the sea-shore; Mr. Reinecke took it at Buffalo, N. Y. My native specimens are from Georgia and eastern Pennsylvania.

386. *Phymatodes variabilis* *Fab.*, *ventralis* Hald.

This species, with numerous named varieties is spread over Europe, from which it is supposed to have been introduced into this country.

"Inhabits from Massachusetts to Alabama (*Hald.*)" I take it here, and have seen it from Kansas and Wisconsin, and it is recorded from Buffalo, N. Y., and Detroit, Mich.; Arizona, *Horn in litt.*

387. *Callidium violaceum* *Linn.*

This Eur-Asiatic species is spoken of in our literature, but the specimens referred to it belong either to *antennatum* Newman, or *janthinum* Dej., which Dr. LeConte says are distinct from it, and valid species, J. A. P. ii, 34. Arctic, east and west Siberia; Amurland. Heyden, 184.

388. *Gracilia minuta* *Fab.*, *fusca* Hald.

Introduced from Europe in articles of commerce into the Eastern States, in which it occurs in various localities. I have taken it here twice; Buffalo, N. Y. (*Reinecke*); New York; Georgia.

389. *Neoclytus erythrocephalus* *Linn.*

This species occurs in Europe in Dalmatia and Istria in the Adriatic Sea. It is common here, and inhabits nearly every portion of our territory eastward from the Rocky Mountains.

390. *Acmæops pratensis* *Laich.*, *strigilata* *Fab.*, *fulvipennis* *Mann.*, *longiceps* Kirby, *semimarginata* *Rand.*

This species is widely spread over the northern parts of America from Hudson Bay to Alaska, southward to Maine and northern Michigan, and down the Rocky Mountains to New Mexico (from which I have specimens), and northward to California. It occurs

in Alpine and northern Europe, and many portions of Arctic and eastern Siberia; the var. *ustulata* Gebler is found throughout eastern Siberia, and at Kamtschatka, and is the prevailing American form, l. c. 235; J. A. P. i, 312 and 323; Annals and Mag. Nat. Hist 1870, v; Col. Amur, 148; Heyden, 194.

391. *Leptura (Strangalia, Pachyta) sexmaculata* Linn.

This is likewise a northern species. My specimens are from Mt. Washington, N. H. From there it extends northward to the Hudson's Bay region and westward to northern Michigan and the Lake Superior region. *Vexatrix* Mann., formerly placed in synonymy, is a true species as shown me by Dr. Horn. Europe (Sweden, Finland). Western and eastern Siberia, J. A. P. i, 312 and 333; Col. Am., 148; Heyden, 195.

392. *L. erythroptera* Kirby.

A variety of *canadensis* Fab. is almost certainly *variicornis* Dalman. According to Mr. E. A. Schwarz (Ent. Am. ii, 161) *cinna-moptera* Hald. is a synonym. *Cribripennis* Lec. is another variety. From an examination of a number of specimens of each of the American forms I am led to believe the varieties named to be merely individual variations in a variable species. The species as a whole extends across the northern part of the continent from the Atlantic to the Pacific, and down the Rocky Mountains to New Mexico. Europe (northern Germany. Russia). Western and common in eastern Siberia to the mouth of the Amur. Col. Am. 147; Heyden, 196.

## CHRYSOMELIDÆ.

393. *Donacia dentata* Hoppe.

This species remains unidentified in our fauna. It inhabits Europe and western Siberia. Heyden, 197.

394. *Zeugophora scutellaris* Suff., *subspinosa* Gebler.

Mr. Schwarz takes this species at Detroit, Mich.; my specimens are from northern Illinois. Its occurrence elsewhere has not been noted. Europe (France. Germany). Western Siberia. Heyden, 198.

395. *Crioceris asparagi* Linn., var. *maculipes* Gebl.

Introduced from Europe about 1859 into Long Island, N. Y.; it is slowly spreading inland, and is abundant (Geneva, N. Y.; Baltimore, Md.; Fairfax Co., Va.) *Lugger*. For figures of it in all its stages; see Lintner's First Rep. N. Y. 239-46. It inhabits Europe and Siberia. Heyden, 198.

396. *C. 12-punctatus* Linn.

This recent importation from Europe was first observed in this country by Mr. O. Lugger, in 1881, near Baltimore, Md., feeding on asparagus. It is spreading "slowly and has now (1886) reached portions of Anne Arundel County, and even Washington City (*Lugger* P. W. i, 59)." It inhabits Europe and portions of western Siberia, and a variety, *10-stigma* Suff., the Amur country in east Siberia. Heyden, 198.

397. *Adoxus vitis* Linn.

This species is widely distributed across the northern part of the continent, extending north from Mount Washington, N. H., to the Hudson Bay region, westward to Alaska and southward through the Rocky Mountains to New Mexico. I do not know of its occurrence in the Atlantic States south of New York. Central and northern Europe and through southwestern Siberia to the Amur region. Heyden, 204; Mann., 1853.

398. *Entomoscelis adonidis* Pallas.

This occurs everywhere through the Rocky Mountains at from 8000–11,000 feet, *Bowditch*; my specimens are from Montana; Hudson Bay region, *Kirby*; southern Europe. France. Germany. Western and eastern Siberia to Turkestan; Heyden, 208; Col. Am. 222.

399. *Prasocuris Phellandrii* Lin.

Illinois (*Crotch*), Ottawa, Canada, *Harrington*; Detroit, Mich., and Veta Pass, Col., at 11,500 feet, *Schwarz*. Europe. Western Siberia. Heyden, 209.

400. *Plagioderia* (*Phædon*) *cochleariæ* Panz.

*Crotch* referred two specimens in Dr. LeConte's collection without exact locality to this species (Pr. 1873, 53); no notice of its occurrence since has been observed, except that it is in Mr. Reinecke's Catalogue of Buffalo Coleoptera. Central and northern Europe. Common throughout all Siberia by the name *armoraciæ* Linn. Col. Am. 224; Heyden, 209.

401. *Gastroidea polygona* Linn.

A common and abundant species, occurring from Nova Scotia to the Mississippi on *Polygonum* (*aviculare*). Europe. Turkestan; eastern Siberia. Heyden, 208.

402. *G. raphani* Fab., *viridula* DeG. ? *formosa* Say.

This species was taken by the Richardson Expedition in lat. 54° and determined by Kirby to be *raphani*, which Dr. Horn thinks is probably correct, and is Say's *formosa*. It occurs in Kansas, *Snow*; Manitoba and New Mexico, whence I have specimens. Central and northern Europe. Western and eastern Siberia, Heyden, 208. Can. Ent. viii, 191.

403. *Lina lapponica* Linn., *interrupta* Fab.

This species is very variable in color and markings. It is usually found on the Salisacæ, and especially the species of *Salix*. It is spread over the greater part of North America to Alaska. Europe. Common in Siberia, Mann., 1853; Col. Am. 224; Nord. 29; Heyden, 205.

404. *L. tremulæ* Fab.

Hudson Bay, *Crotch*; Mount Washington, N. H., *Austin*; northern Michigan, *Schwarz*. Northern Europe. Riley, in the Amer. Ent. 1880, 160.

405. *Gonioctena arctica* Mann., *affinis* † Mann.

This species occurs abundantly in Alaska, and was taken on the Nelson and Churchill Rivers, Hudson Bay Territory by Dr. R. Bell. Mannerheim describes five color varieties. Mr. George R. Crotch considered it a probable variety of *G. Linæana* *Schrank*, *triandra* Suff., a species occurring in Arctic Siberia and southward to the Amur. Mann., 1852-53; LeConte Cat.; Pr. 1873, 52; Heyden, 208; Col. Am. 223.

406. *G. pallida* Lin.

Also very variable in color, sculpture and markings. Kirby's *rufipes* is placed in synonymy by Dr. Horn. Occurs in the Hudson Bay region, *Kirby*; York Factory, Hudson Bay and Norway House to Oxford House, *LeConte Cat.*; Lake Superior, *LeConte*; Marquette, Isle Royal, Bachewauung Bay, *Schwarz*. Central and northern Europe. Western Siberia. Heyden, 208. Can. Ent. viii, 191.

407. *G. viminalis* Lin.

Alaska, *fide* Ménétériés. Arctic and western Siberia to the Amur countries. Mann., 1853; Heyden, 108.

408. *Phyllodecta vulgatissima* Linn., ? *interstitialis* Mann.

Occurs here abundantly on *Salix longifolia*; Mount Washington, N. H.; Ottawa, Canada; Buffalo, N. Y.; Detroit, Mich.; Lake

Superior region; Cincinnati, Ohio. *Interstitialis* occurs in Alaska. Europe. Turkestan; eastern and western Siberia. Nord., 30; Heyden, 209.

409. *P. vittellinæ* Linn.

Lake Superior, *vide* Kirby, *Le Conte*; Ontario, *Bethune*; taken in the Richardson Expedition, *Kirby*. Can. Ent. viii, 191. Europe. Arctic and western Siberia; the Amur countries. Nord., 30; Heyden, 209.

410. *Agelastica halensis* Linn.

Two specimens of this fine European species were once received by Dr. LeConte, which were said to have been taken at Farmington, Conn., but further notice of its occurrence has not been observed. Common in Europe. Western Siberia. Pr. 1865, 210; Heyden, 211.

411. *Galeruca marginella* Kirby, var. *punctipennis* Mann., ? var. *luctuosa* Mann.

Dr. LeConte and Crotch unite in saying that this species is probably inseparable from *nymphææ* Linn. (Pr. 1865, 217; Pr. 1873, 55). Kirby described it from a single specimen taken in lat. 65°, and LeConte referred to it one from Fort Simpson, Hudson Bay Territory (Kirby, 220); *punctipennis* occurred in California; *luctuosa* in Alaska; *nymphææ* is common in Europe. Western Siberia. Heyden, 210.

*G. sagittariæ* Gyll., a var. of *nymphææ* Linn., occurs from Virginia northward to Hudson Bay and Manitoba regions and westward to Kansas. It inhabits Europe. Western and eastern Siberia, and the Amur country (*Le Conte Cat.*). Heyden, 210; Col. Am. 232.

412. *G. xanthomelaena* Schrk., *crataegi* Forst.

This beetle has been imported from Europe into the Eastern States, and is in some places very abundant and destructive to the Elm; as yet, it has not occurred west of the Allegheny Mountains. Turkestan. Heyden, 210.

413. *Crepidodera rufipes* Linn., *erythropus* Mels.

This species is excessively abundant here. "Middle and Southern States," Crotch, Pr. 1873, 71. Ohio, *Dury*; Kansas, *Popenoe*. Europe.

414. *C. helxines* Linn., *nana* Say, *violacea* Mels., *æreola* Lec., *opulenta* Lec.

This species is subject to variation; it extends from the Atlantic to the Pacific and is very abundant. Inhabits Europe and western Siberia. Heyden, 211; Nord., 30; Chabarofka, Heyden, 1885.

415. *C. Modeeri* Linn., var. *mancula* Lec.

Hudson Bay, *Crotch*; Detroit and Marquette, Mich., *Schwarz*; *C. mancula* California, *LeConte*; Oregon, *Crotch*; Kansas, *Popenoe*. Europe. Western and Arctic Siberia. Nord., 30; Heyden, 211.

416. *Phyllotreta sinuata* Steph., *Zimmermanni* Crotch.

Missouri, *Riley*, *Crotch*; Detroit, *Schwarz*. Europe. Eastern Siberia. Heyden, 211.

## BRUCHIDÆ.

417. *Bruchus rufimanus* Sch.

This species was once bred from pea-pods imported from Switzerland (T. iv, 313), but no other record has been observed, except one which I know to be in error.

418. *B. pisi* Linn.

"Abundant over nearly the entire globe wheresoever peas are cultivated," *Horn*, l. c.

419. *B. scutellaris* Fab.

"This species appears to have been widely distributed over the entire globe (*Horn*, l. c. 318)." *Chinensis* Linn. is the name it bears in Europe, denoting its Asiatic origin. My native specimens are from Louisiana and Florida.

420. *B. obsoletus* Say, *obtectus* Say, *fabæ* Riley.

This species occurs in many places eastward from the Rocky Mountains depredating especially on beans (T. iv, 337; *Riley*, Missouri Rep. iii, 52, etc.). It was found in beans from various European countries in the Centennial Building at Philadelphia, but I have not observed the name on any European catalogue. Pr. 1876, 269.

## TENEBRIONIDÆ.

421. *Blaps mucronata* Latrl.

A few specimens of this European species occurred near Baltimore, Md., *Horn*.

422. *B. similis* Latrl.

This is also another common European species that occurred at Alexandria, Va., very abundantly. Native specimens of these species were compared with the European by Dr. Horn in his recent visit to Europe, and any previous doubts about their correct identification is now dispelled; they are the two commoner English species. Can. Ent. xvi, 37; xxi.



423. *Upis ceramboides* Linn., *reticulata* Say.

This species inhabits the northern portion of the continent from Hudson Bay southward to New Hampshire (Nova Scotia, *Harrington in litt.*; New York, Michigan, Wisconsin, Manitoba, Montana). Germany. Northern Europe. Eastern Siberia, the Amur basin. Tr. Am. Phil. Soc. xiv, 338; Col. Am. 139. Iarzowa Selo, Jenisei, lat. 60° 10'. Nord., 27; Heyden, 146.

424. *Tenebrio obscurus* Fab., *tristis* Hald.

This common European species has been introduced into this country by commerce, and is spread from the Atlantic to the Rocky Mountains; also in eastern and western Siberia, l. c. 345; Heyden, 146.

425. *T. molitor* Linn.

This species has likewise been introduced from Europe by commerce, and occurs all over the United States and Canada from Nova Scotia to Alaska, and southward to Mexico, depredating on flour and stored grain. Eastern and western Siberia. Heyden, 146.

426. *Tribolium ferrugineum* Fab.

This and the five following species have been introduced by commerce, and are found where flour and grain are stored. The occurrence of this species in this country is noted in various places from Florida to Alaska. Europe. Lintner gives a good account of it in 2d Rep. State Entomologist, N. Y., p. 136-39.

427. *T. madens* Charp.

Though widely distributed in this country, this species does not appear to be common. I have specimens from New Mexico and Hamilton, Canada; Ottawa, *Harrington*; Marquette, Michigan, *Schwarz*. Europe.

428. *Gnathocerus cornutus* Fab.

Occurred in California, inside of an army biscuit, Horn, l. c. 336; Alaska, Mann., 1852. Notice of other occurrences has not been observed. Europe.

429. *Echocerus maxillosus* Fab.

This species is common here, and in many places throughout the United States and Canada (Florida; Cincinnati; Detroit; Milwaukee; Alaska).

430. *Alphitobius diaperinus* Panz.

This species is likewise found here in feed stores. I have specimens from Florida; Cincinnati, *Drury*; Horn, l. c. 369.

431. *A. piceus* Oliv., *mauritanicus* Fab.

My specimens are from St. Augustine, Fla., and New Orleans, La.; Philadelphia, Pa., Horn, l. c. Alaska, Mann., 1852.

### MELANDRYIDÆ.

432. *Xylita lævigata* Hellen., *decolorata* Rand., *buprestoides* Payk., *discolor* Fab.

This species is apparently not abundant. It inhabits Maine, Canada, the Lake Superior region; Cincinnati; Dury. Central and northern Europe. Western Siberia, Heyden, 148; var. (*nigricans*) *punctulata* Mhm. Arctic Siberia, Heyden, 224.

433. *Serropalpus barbatus* Schall., *striatus* Hellen., *substriatus* and *obsoletus* Hald.

This species is distributed over the northern part of the continent from Maine (my specimens are from there) to Alaska (New York, Canada, Michigan, Lake Superior region, Manitoba, Oregon). Central and northern Europe. Western and eastern Siberia. Heyden, 148; Mann., 1852.

434. *Hypulus* (*Phlæotria*, *Dircæa*) *vaudoueri* Muls., *fusca* Lec.

("Widely diffused, but not commonly met with. Extends across the continent from Nova Scotia to California, and as far south as North Carolina," Horn, T. xv, 41) Michigan, Schwarz; Lake Superior, Virginia and North Carolina, LeConte. Two specimens occurred here. Europe (France).

### PYTHIDÆ.

435. *Pytho americanus* Kirby, *deplanatus*, Mann.

("This species occurs from Canada to North Carolina, and in our fauna represents, and may even be identical with *depressus* Linn." Horn, l. c. 46) Cincinnati, Ohio; Kansas (whence my specimens); Buffalo, N. Y.; Ottawa, Canada; Marquette, Mich.; Wisconsin; Alaska. *Depressus* occurs in Alpine and northern Europe; Arctic to the southern parts of eastern and western Siberia. Heyden, 156; Nord., 28.

### CEDEMERIDÆ.

436. *Nacerdes melanura* Linn., *Oedem. apicalis* Say.

According to Say this species is found in Pennsylvania, Louisiana and other parts of the Union. Two specimens occurred to me here; Cincinnati, Ohio, Dury; Kansas, Snow. Nova Scotia, Harrington,

*in litt.*; California; Yucatan, *Horn, in litt.* No other record has been noticed, and I have never met with it on an exchange list. Europe and western Siberia; Turkestan, Heyden, 156.

### ANTHICIDÆ.

437. *Anthicus floralis* Linn., *basillaris* Say.

This, like some other species of the genus, is very variable. It occurs here, and is spread generally from the Atlantic to the Pacific, extending as far north as the Lake Superior region. Probably imported in articles of commerce. P. vi, 92 and 98. Europe. Turkestan, Heyden, 149.

### PYROCHROIDÆ.

438. *Pyrochroa fuscicollis* Mann., var. *punctum* Motsch.

Specimens from Alaska have lately been seen by Dr. Horn, T. xv, 48. Eastern Siberia to Kamtschatka, Heyden, 149. Motschulsky describes it and gives a colored figure. Col. Am. 143.

### OTIORHYNCHIDÆ.

439. *Barynotus Schoenherri* Zett.

Occurs in New Foundland. Europe (Sweden; Lapland). Mon., 22. Nativity in doubt.

440. *Brachyderus incanus* Linn.

This species, introduced from Europe, has occurred at St. Louis, Mo. C. 439.

441. *Otiorhynchus sulcatus* Fab.

"Occurs in Massachusetts; Canada; New Foundland; Nova Scotia," Horn, Mon. 61; New York. It also occurs here in Pennsylvania rarely. Introduced from Europe, where it inhabits the central and northern countries.

442. *O. ovatus* Linn., *ligneus* ‡ Lec.

This is an aggressive beetle; introduced originally from Europe into the New England States, probably in cemetery shrubbery; it has spread westward to Chicago, Ill., from a cemetery near which I have specimens. Nova Scotia, *Harrington in litt.*; Ottawa, Canada; Detroit, Mich. Abundant here, and known popularly as *the graveyard bug*. It also inhabits Arctic Siberia on the Jenisei, and the more southern parts of western Siberia. Heyden, 157; Horn, l. c. 61; Nord., 28.

443. *O. rugifrons* Gyll.

This species, which inhabits Austria and northern Europe, has been introduced, and "occurs in the Middle States," Horn, l. c. 62.

444. *O. maurus* Gyll., *nodosus* Fab.

Occurs in Greenland, and in Alpine and northern Europe, and with the following species is considered to be native. Horn, l. c. 62.

445. *O. monticola* Germ., *arcticus* Fab.

Occurs also in Greenland, and in Alpine and boreal Europe. Horn, l. c. 62.

446. *Phyllobius glaucus* Scop., *calcaratus* Fab.

Taken once in Canada, and its occurrence may have been accidental. Horn, l. c. 104. No record of its further occurrence has been observed. Europe.

447. *Sciaphilus muricatus* Fab.

This common European species has been found at Brookline, Mass., by Mr. F. C. Bowditch, who took it on *Populus balsamifera*. Psyche v, 137.

448. *Strophosomus coryli* Fab.

This is likewise common in Europe. It was also taken by Mr. Bowditch at Brookline by sifting, and by Mr. H. B. Bailey, at South Orange, N. J., on *Betula lenta*. Psyche v, 137. I have specimens taken in one of the New England States in July, 1888.

## CURCULIONIDÆ.

449. *Sitones lineellus* Bond., *indifferens* Say, *scissifrons* Say.

Occurs in Kansas and Texas, *Le Conte*. Dr. LeConte considered this and the species of *Sitones* following to have been introduced with *tibialis* in doubt. The genus is as yet unstudied in this country and the species are now in a state of confusion, badly confounded. The present species inhabits Germany and the Amur country. Heyden, 161; Mon. 114.

450. *S. hispidulus* Germ.

Occurred abundantly at Long Branch, N. J., about the roots of the grass growing on sand-hills, l. c. 413. New Jersey and Pennsylvania, *Casey*. It is general in Europe and Siberia. Heyden, 161.

451. *S. flavescens* Marsh., *caninus* Gyll.

This species has a wide distribution. It occurs here, and I have it from St. Augustine, Fla., and from northern Iowa, Ohio, Indiana, Illinois, Marquette and Detroit, Michigan, *Schwarz*; New York,

*Reinecke*; Canada and Nova Scotia, *Harrington*. It is general in Europe. Asia (Turkestan, Mongolia, western Siberia). Heyden, 161; depredates on several species of *Trifolium*.

452. *S. tibialis* *Herbst.*, var. *ambigua* *Schon.*

This species is likewise widely diffused, and is probably native, occurring from Canada to Vancouver, and down the Rocky Mountains to New Mexico (Kansas, Dakota, Hudson Bay Territory, Canada, *LeConte*; New York, *Reinecke*; Kansas and New Mexico, *Snow*; Michigan and everywhere in the mountains of Colorado at from 7000–11,500 feet, *Schwarz*; Vancouver, *Taylor*). Europe. Crimea. Turkestan. Heyden, 161. There are many varieties.

453. *S. crinitus* *Oliv.*

Oregon and California, *LeConte*; l. c. 115. Europe. Siberia. Amurland. Heyden, 161; Chabarofka, Heyden, 1887.

454. *Phytonomus punctatus* *Fab.*, *opimus* *Lec.*

This European insect, though probably imported into the United States many years ago, has since 1881 multiplied to such an extent in some of the northern and western counties of New York as to destroy whole fields of clover, for which it seems to have acquired a taste; specimens occurred here, but on what is not known. It reached Canada 1884. T. ix, p. xxxvi; Lintner, 1st Rep. 247, Can. Ent. xvi, 144, 182, 209, 215. It inhabits Europe generally, and is found in the southeast part of western Siberia. Heyden, 165.

455. *P. elongatus* *Payk.*

Inhabits Greenland. Central and northern Europe and western Siberia. Mon. 125; Heyden, 166.

456. *P. nigrirostris* *Fab.*

Has been imported into some of the Eastern States from Europe, and appears to have a taste for clover. Massachusetts, *Blanchard*; Michigan, *Schwarz*; Canada, *Harrington*; New Brunswick, *Fletcher*. Can. Ent. xvi, 215, 217.

457. *Lepyrus colon* *Linn.*, var. *4-notatus* *Bohm.*

This fine species inhabits the colder regions of both hemispheres. In this country Mount Washington, N. H., *Austin*; Hudson Bay region, lat. 65°, *Kirby*; and the Nelson and Churchill Rivers, *Bell*; New Mexico, *Horn*, list of insects taken by Thomas; my specimens are from northern Wisconsin, where it seems abundant. Europe and western Siberia. The var. *4-notatus* occurs in Arctic Siberia. Heyden, 174.

458. *Hypomolyx* (*Hylobius*) *piceus* DeG., *pineti* Fab., *pinicola* Coup., *heros* Lec. (undescribed) L. S.

This is another fine northern species. Michigan, *Schwarz*; Lake Superior; Hudson Bay Territory and Canada, *LeConte*. Central and northern Europe. Western and eastern Siberia. Mon., 139; Heyden, 174; Nord., 28; Heyden, 1885.

459. *Grypidius equiseti* Fab.

This species inhabits in Canada, Kansas and on the north shore of Lake Superior, *LeConte*, l. c. 163; Michigan, *Schwarz*; Ottawa, Canada, *Harrington*; Hamilton, Canada (my specimens). Europe. Arctic and west Siberia. Dauria. Heyden, 174; Nord., 28.

460. *G. brunnirostris* Fab.

Occurs in Oregon, Mon. 163; Veta Pass, Colorado, at 9200 feet, *Schwarz*; my specimens are from Wyoming. Northern and central Europe.

461. *Tanysphyrus lemnae* Fab.

This minute beetle is excessively abundant here in all ponds that produce *Lemna*. Michigan, *Schwarz*; Canada, *Harrington*. Mon., 178; Can. Ent. xvi, 136. Europe.

462. *Acalyptus carpini* Herbst., var. *sericeus* Gyll.

This species is as yet not very well known by collectors (see description P. Am. P. Soc. xvii, 621). It occurs in Michigan and Massachusetts and at York Factory, Hudson Bay (*Lec. Cat.*); Ottawa, Canada, *Harrington in litt.* I take it here and have it from Illinois, Amurland (Chabarofka). Heyden, 1887. Europe.

463. *Elleschus bipunctatus* Linn.

This is a European species found in Canada and Michigan. It is very abundant here in Pennsylvania, in June, on a small upland willow, l. c. 621; Can. Ent. xvi, 107.

464. *Nanophyes pallidulus* Grav.

This species has occurred in Louisiana, and Mr. Schwarz took it at Alamosa in the Rocky Mountains. Europe (Italy and southern France).

465. *Cionus scrophulariae* Linn.

This European species occurred to Say, and a specimen collected in Louisiana was sent to Dr. Horn, Mon. 220. No other notice has been observed. It is also found in western Siberia. Heyden, 177.

466. *Gymnetron tetrum* Fab.

Introduced from Europe into Pennsylvania this species has spread to West Virginia, eastern Ohio, New York (*Reinecke*), southern Michigan, *Schwarz*; Canada, *Harrington*. It lives only on *Verbascum thapsus*, Mon. 220. It occurs in the southern parts of western and eastern Siberia. Heyden, 177.

467. *Cryptorhynchus lapathi* Linn.

This fine European species has become naturalized, having been taken near West Bergen, N. J., near Williamsbridge, N. J., and on Staten Island, N. Y., by Mr. Julich, Ent. Am. iii, 123. Asia (western and eastern Siberia; Amurland; Kirghis Steppes). Heyden, 176.

468. *Cnemogonus epilobii* Payk.

British Columbia and Great Slave Lake, Mon. 269. Marquette and Isle Royal in Lake Superior, *Schwarz*. Northern and central Europe.

469. *Ceutorhynchus rapæ* Gyll.

Canada, Middle and Western States, Mon. 274 (Illinois, Michigan, New York, Kansas, *Snow*). Central and northern Europe.

470. *C. cyanipennis* Illig., Germ.

This species of Central and southern Europe has lately been taken at Ithaca, N. Y., and also near Baltimore, Md. Ent. Am. v, 57.

Obs.—*Phytobius velatus* Beck, mentioned by Dr. LeConte should be omitted. Dr. Horn has recently examined the specimen in cab. LeConte and finds it to be the new species referred to by Schwarz. Pr. Ent. Soc. Wash. i, p. 76, and not *velatus*.

471. *Rhinoncus pericarpus* Linn., *triangularis* Say.

This European species is widely distributed eastward from the Rocky Mountains, but is restricted to localities, Kansas, Illinois, Indiana, Michigan, Ohio, Pennsylvania, Canada, *Harrington in litt.* Asia (west Siberia; Turcomania; var. *conjectus* Sch. Siberia). Heyden, 178.

472. *R. pyrrhopus* Boh.

Abundant from the Atlantic to New Mexico on various *Polygonum*. Individually there is much variableness in color, and in the coarseness of the thoracic punctuation. Amurland (Chabarofka). Heyden, 1887.

## BRENTHIDÆ.

473. *Cylas formicarius* Fab., *Otidocephalus elegantulus* Summers.

This singular insect lives on the roots of the sweet potato, and occurs in the Southern States (Florida, Louisiana), from which I have specimens. Cuba. Madagascar. India. Cochin China. Mon. 327.

## CALANDRIDÆ.

474. *Calandra oryzzæ* Linn.

This species is cosmopolite, and in this country is distributed from Florida to Alaska, depredating on grain of all kinds. Siberia and the Amur country to Kamtschatka. Heyden, 179.

475. *C. remotepunctata* Gyll.

This species extends from Florida to Vancouver, whence I have specimens. I have specimens from Europe labeled *granaria*. It also depredates on grain.

476. *C. granaria* Linn.

I have seen no native specimes of this European species. It occurs in Missouri, according to Mr. C. V. Riley, depredating on wheat. Mon. 333; Canada, *Harrington in litt.* Resembles the preceding closely.

## SCOLYTIDÆ.

477. *Hypothenemus eruditus* West., *hispidulus* Lec.

This species is spread by commerce. I find it here depredating on various foreign nuts in the shells of which it breeds. Its native country is now unknown.

478. *Xyloterus bivittatus* Kirby, *rufitarsus* Kirby (*LeConte*), *cavifrons* Mann.

"Maine, Canada. Vancouver Island, Alaska." Mon. 357. Mt. Washington, N. H.; Ottawa, Canada; Hudson Bay region, *Kirby*; Lake Superior; Colorado; New Mexico. Mr. Schwarz, a competent authority in this family, agrees with Mr. Eichoff in considering this a synonym of *X. lineatus* Oliv., a species of central and northern Europe. Ent. Am. ii, 41. Siberia, Heyden, 183.

479. *Xyleborus xylographus* Say, *saxeseni* Ratz.

A comparison of specimens is necessary to confirm this synonymy, *Schwarz*. Ent. Amer. ii, 41.

480. *Cryphalus jalappæ* Letz.

This species is widely distributed by commerce, and its native country is now unknown. Its occurrence in this country is probably only occasional.



481. *Coccotrypes dactyliperda* Fab.

Which lives in dates and areca nuts, is sometimes brought into this country with these fruits. Ent. Am. ii, 42.

482. *Dryocetes septentrionis* Mann., *autographus* Ratz., *semicastaneus* Mann.

"Alaska. Canada. Virginia; under pine bark," Mon. 361. Mr. Schwarz took it at Detroit, Mich., and in the Lake Superior region, and agrees with Eichhoff's synonymy. Ent. Am. ii, 42.

483. *Scolytus rugulosus* Ratz.

This is a species probably introduced from Europe, and in many places from the Atlantic to the Mississippi; is very destructive to peach, cherry and other fruit trees. Another species, so much like it as to be separable only by microscopy, breeds in dead hickory limbs. Can. Ent. xvi, 161; xvii, 48; Pr. Ent. Soc. Wash. i, 30. Turkestan, Heyden, 182.

484. *Crypturgus atomus* Lec., *pusillus* Gyll.

"Canada, Massachusetts, New York; under bark of dead pine branches. Length .04 inch." Mon. 387; Ent. Am. ii, 56. Europe.

485. *Hylurgops pinifex* Fitch, *Hylastes glabratus* Zett., *decumanus* Er.

"Lake Superior, Canada, Ohio." Mon. 390; Ent. Am. ii, 56. Eastern Siberia; the Amur country, Heyden, 182; Col. Am. 156. Europe.

486. *Hylastes trifolii* Mull.

This European beetle was first discovered in this country in 1878 in Yates Co., N. Y., depredating on clover, and is spread somewhat in western New York. Lintner, 1st Rep. N. Y., 247; Riley, Rep. Dep. Agricult. 1878; Am. Entomologist iii, 180.

## ANTHRIBIDÆ.

487. *Aræocerus fasciculatus* DeG., *coffæ* Gyll., *capillicornis* Say.

This species is cosmopolite, being carried from place to place by commerce. In this country it occurs in many places on both sides of the continent. I have specimens from Florida, New York and Oregon.

## Corrigenda et Addenda.

Page 91, for vol. ii, read vol. xii, part iii.

No. 41, for also in California, read in Nova Scotia.

No. 55, for 4-lineatus, read 10-lineatus.

No. 70, after France. add Finland.

No. 175, for Redemont, read Piedmont.

No. 264, add Vorogova. Arctic Siberia. Nord., 26; Heyden, 222.

No. 323, insert DASYLLIDÆ above 324.

The number of families represented in this catalogue is 50 ; number of genera, 261 ; number of species, 484, three numbers in the catalogue not representing Europa-American species. Of this number 328 occur in Asia, 40 of which are not recorded, so far as I have observed, with a European habitat.

An opinionative estimate of the derivation of these species is : native, 278 ; introduced (from Europe, except three), 156 ; in doubt, 50. Of the introduced species about 60 are insects of commerce, leaving 96 as the number of accidental importations. Of these many are naturalized beyond a doubt, but others are still on probation.

NOTE.—74. *Agabus longulus* is not the same as *A. dissimilis*, comparison with the LeConte type having been made by Dr. Horn while this was passing through the press.

The following species should be dropped from American catalogues :

- |   |  |
|---|--|
| 10. Notiophilus aquaticus (perhaps a<br>wrong determination). | 212. Amphichroum canaliculatum (a<br>wrong determination). |
| 11. Leistus piceus.   | 349. Opilus domesticus.                                    |
| 96. Sphæridium scarabæoides.                                  | 393. Donacia dentata.                                      |
| 120. Tachyusa pygmæa.   | 410. Agelastica halensis.                                  |
| 202. Oxytelus depressus.                                      | 446. Phyllobius calcaratus.                                |

Species requiring further records of occurrence to admit them to a permanent place in our faunal lists :

- |                                 |                              |
|---------------------------------|------------------------------|
| 14. Nebria nivalis.             | 179. Pæderus riparius.       |
| 38. Licinus silphoides.         | 206. Coprophilus striatulus. |
| 61. Hydroporus obscurus.        | 221. Homalium rivulare.      |
| 63. H. glabriusculus.           | 236. Adonia constellata.     |
| 92. Helophorus granularis.      | 261. Læmophloeus alternans.  |
| 99. Cereyon melanocephalum.     | 291. Cercus bipustulatus.    |
| 131. Myllæna minuta.            | 326. Cyphon coarctus.        |
| 138. Staphylinus erythropterus. | 345. Anthaxia salicis.       |
| 139. S. caesareus.              | 377. Aphodius depressus.     |
| 143. Philonthus politus.        | 383. Tropinota hirta.        |
| 150. P. quisquiliarius.         | 387. Callidium violaceum     |
| 161. Xantholinus punctatus.     | 400. Plagioderma cochleariæ. |
| 163. Leptacinus parumpunctatus. |                              |

Species requiring further comparison to establish their identity :

- |  |  |
|--|--|
| 45. Platynus Mulleri = <i>planipennis</i> .                    | 264. Dendrophagus crenatus = <i>glaber</i> .                   |
| 48. Blechrus glabratus = <i>nigrinus</i> .                     | 275. Dermestes bicolor = <i>elongatus</i> .                    |
| Hydrovatus cuspidatus = <i>pustulatus</i> .                    | 302. Ips 4 guttatus = <i>fasciatus</i> .                       |
| Rhantus Grapii = <i>sinuatus</i> .                             | 342. Chalcophora mariana = <i>virginiensis</i>                 |
| 133. Acylophorus glabricollis = <i>pra-</i><br><i>tensis</i> . | 343. Melanophila appendiculata = <i>lon-</i><br><i>gipes</i> . |
| 171. Stenus canaliculatus = <i>congener</i> .                  | 402. Gastroides viridula = <i>formosa</i> .                    |
| 198. Pseudopsis sulcata = <i>columbica</i> .                   | 405. Goniocetena Linnæana = <i>arctica</i> .                   |
| 237. Hippodamia parenthesis = <i>amæna</i>                     | 435. Pytho depressus = <i>americanus</i> .                     |
| 241. Coccinella nivicola = <i>monticola</i> .                  | 479. Xyleborus xylographus = <i>saxenii</i>                    |
| 243. C. 11-punctata = var. <i>menetriesi</i> .                 |  |

## INDEX TO FAMILIES.

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ANTHRIBIDÆ.....	487	1	1	LAMPYRIDÆ.....	346	2	2
BRENTHIDÆ.....	473	1	1	LATHRIDIIDÆ.....	303	4	10
BRUCHIDÆ.....	417	1	4	LEPTINIDÆ.....	105	1	1
BUPRESTIDÆ.....	342	3	4	MALACHIDÆ.....	348	1	1
BYRRHIDÆ.....	320	3	4	MELANDRYIDÆ.....	432	3	3
CALANDRIDÆ.....	474	3	3	MONOTOMIDÆ.....	316	1	3
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COCCINELLIDÆ.....	235	6	13	PHALACRIDÆ.....	234	1	1
COLYDIIDÆ.....	249	1	2	PLATYPSYLLIDÆ...	104	1	1
CRYPTOPHAGIDÆ...	266	4	5	PSELAPHIDÆ.....	112	1	1
CUCUJIDÆ.....	252	7	14	PTINIDÆ.....	355	10	12
CURCULIONIDÆ.....	449	15	24	PYROCHROIDÆ.....	438	1	1
DASYLLIDÆ.....	324	1	3	PYTHIDÆ.....	435	1	1
DERMESTIDÆ.....	273	4	13	RHYSODIDÆ.....	251	1	1
DERODONTIDÆ.....	319	1	1	SCARABÆIDÆ.....	367	7	17
DYTISCIDÆ.....	54	11	36	SCOLYTIDÆ.....	477	10	10
ELATERIDÆ.....	327	6	15	SILPHIDÆ.....	106	5	6
ENDOMYCHIDÆ.....	248	1	1	STAPHYLINIDÆ.....	113	48	114
GYRINIDÆ.....	90	1	2	TENEBRIONIDÆ.....	421	7	11
HALIPLIDÆ.....	53	1	1	TRICHOPTERYGIDÆ	227	3	7
HISTERIDÆ.....	286	3	4	TROGOSITIDÆ.....	313	3	3

A study of the distribution of the species here presented must have an important bearing in the study of the ancient geography of the Northern Hemisphere. The large number of native species in common and the intimate relationship between the Coleoptera of northwestern America and northeastern Asia is brought out very prominently, while on the other hand the paucity of native common species on both the Atlantic coasts is as plainly presented. Both Drs. LeConte and Horn have frequently adverted to this in their writings, and this merely furnishes statistic proof.

Palæontological geography cannot be entered on here; suffice it to say that, from coleopterological considerations, the indications are that Europe and America were formerly as widely separated by water as they now are; that eastern and western North America were divided by water centrally (the northeastern part probably submerged in whole or in part); that the area now occupied by Behring Sea from Kamtschatka to Alaska and far west of the Aleutian Islands was land, and possessed a more temperate climate than at present.

I cannot better close this paper than by referring to several papers by Dr. LeConte relating to distribution, palæontology, etc.:

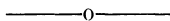
1. On certain Coleoptera indigenous to the eastern and western continents, *An. Lyc.* iv, 159, etc.

2. On the parallelism, equivalents and analogues of American and European, Arctic and sub-Arctic forms, etc., *L. S.* 239, etc.

3. Observations, *inter alia*, on the much greater number of genera and species common to both continents on the Pacific than on the Atlantic sides, *P. R. R.* 1 *et seq.*

4. Tables relating to transcontinental distribution, *J.* iv, 9 *et seq.*

5. Address to the American Association for the Advancement of Science (contains much valuable palæontological matter), *American Naturalist*, ix, 481, etc.



My most sincere thanks are extended to Mr. W. H. Harrington and Mr. F. Blanchard for manuscript records of distribution; to Dr. George H. Horn for valuable suggestions and much unrecorded distribution, and especially for his kindness in supervising and correcting the proof sheets; and lastly to Mr. Charles S. Blake, the scientific compositor, whose work has been so perfect as to scarcely require correction.